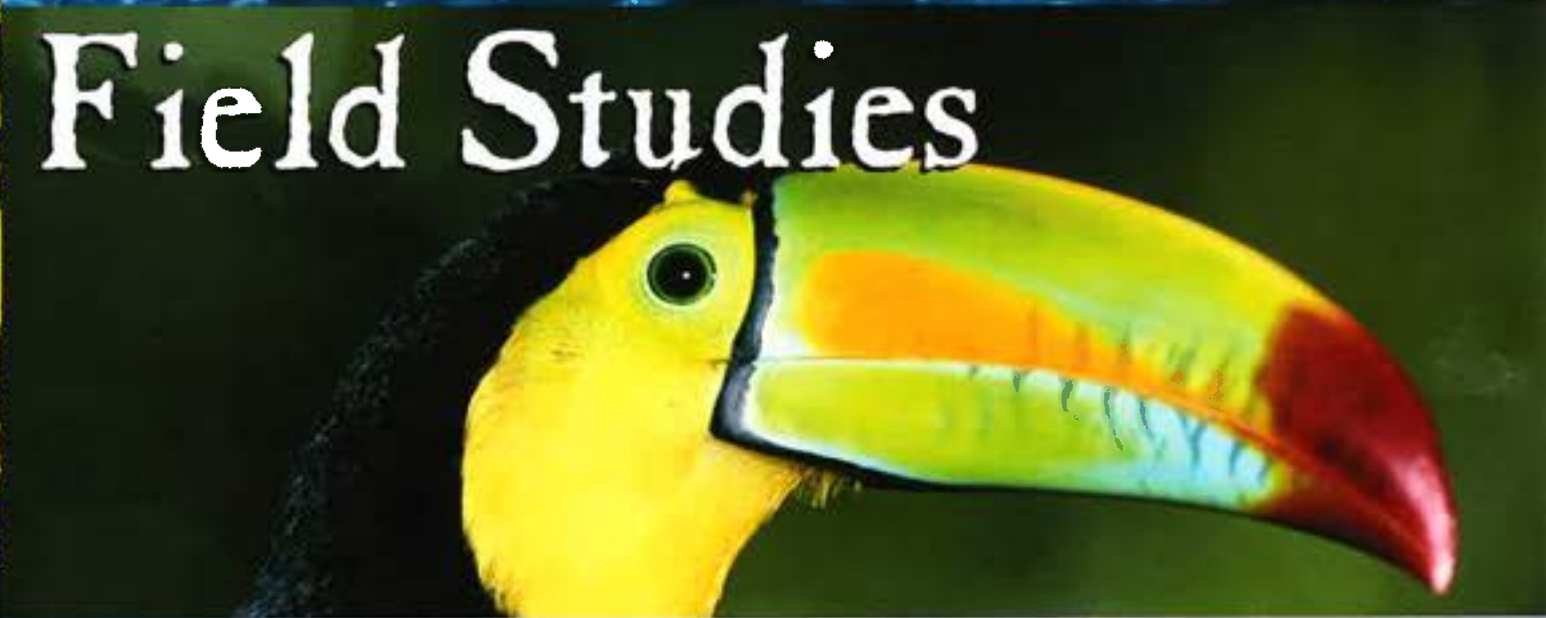


A scuba diver is shown underwater, swimming towards the right. The water is a deep blue, and there are some rocky structures or coral in the background.

Environmental

Field Studies

A close-up of a toucan bird's head. It has a large, colorful beak with shades of yellow, orange, and red. The bird's feathers are black and yellow.

Abroad

A herd of elephants is walking across a dry, grassy savanna. In the background, a safari vehicle with several people inside is visible.

The SCHOOL for FIELD STUDIES

Semester & Summer Programs

COSTA RICA · CARIBBEAN · KENYA
BRITISH COLUMBIA · BAJA MEXICO · AUSTRALIA

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The School for Field Studies
16 Broadway, Beverly, MA 01915-4435
Phone: 800.989.4418 Fax: 978.927.5127
E-mail: admissions@fieldstudies.org
www.fieldstudies.org

A photograph of a person in a kayak on a calm body of water during a vibrant sunset. The sky is a deep orange-red, and the sun is a large, bright yellow-orange orb on the horizon. The water reflects the colors of the sky, and the silhouette of the kayaker is visible in the distance.

The School for Field Studies
provides motivated young people
with an excellent practical education in
environmental studies, enabling them to
become more environmentally literate and
aware and to make substantial contributions
to the sustainable management of the
world's natural resources.

SFS Overview



About The School for Field Studies

Founded in 1980, The School for Field Studies (SFS) is the country's oldest and largest study abroad program exclusively devoted to undergraduate environmental field studies. SFS teaches students environmental problem-solving skills through cooperative field work with local communities, conservation organizations and government agencies. SFS deals with a diverse range of critical environmental issues in ecosystems around the world. Our high-quality, practical education in environmental studies teaches students field research skills and enables them to make substantial contributions toward the sustainable management of the world's natural resources.

Why study with SFS?

Students embark on study abroad programs for a variety of reasons—a sense of adventure, a desire to experience a new environment and culture, a chance to gain hands-on field skills and build a resume. Nearly all emerge with a deeper understanding of the interconnectedness of the global community and their place within it. SFS allows you the chance to apply and expand upon your academic learning by studying in some of

the most beautiful and rare ecosystems in the world. For example, SFS students in Kenya help Maasai pastoralists develop sustainable land-use practices and wildlife conservation policies. Our students in Baja, Mexico explore conservation strategies to protect gray whales and marine turtles.

Under the close guidance of our faculty and field staff, you will work with local community leaders, conservation and government agencies to address key environmental problems. You will make real contributions toward preserving the balance and vibrancy of human communities and ecosystems, and have an opportunity to learn field research and decision making skills that will last you a lifetime.

How do you choose a program?

We encourage you to consider the issues and Direct Research at each field station and select a program that fits your personal concerns as well as your academic and long-range career goals. Our Admissions Counselors will help you select the appropriate program and put you in touch with an SFS graduate for a first-hand, student perspective. SFS works on current environmental issues that benefit real communities. As a result, students at each center gain relevant field experience, transferable skills and a readiness for working in the professional world no matter which program they choose.

You will have the choice of focusing in one of the following research areas:

-  Caribbean: coral reefs, marine parks, fisheries management and economic diversification
-  Australia: tropical rainforest ecology and reforestation
-  British Columbia: coastal temperate rainforest, forest management and stream ecology
-  Baja, Mexico: marine mammals, sea turtles and coastal community resource management
-  Costa Rica: applied tropical ecology and protected area management
-  Kenya: Maasai community wildlife management

Student Body

SFS welcomes a diverse student body and promotes an atmosphere open to different cultures and perspectives. Students come to us with a broad spectrum of backgrounds and experiences. In keeping with our interdisciplinary approach to environmental problem-solving, we strive to build teams that represent a cross-section of the global student body, including liberal arts, science and economics majors.

What language preparation will you need?

All SFS courses are taught in English, however, your interaction with the local community will be greatly enhanced if you have local language conversation skills. We do offer informal language instruction at our Baja, Kenya and Costa Rica programs. Please note that you will need to have completed at least one semester of college-level Spanish or otherwise demonstrate a level of proficiency to participate in our Costa Rica semester program.

Safety

The safety and well-being of our students is a high priority at SFS. Because we operate permanent field stations, we are able to offer the infrastructure and on-site expertise to monitor risk. In addition to a Safety Advisory Committee, we employ a full-time Safety Director. And at each center, a Student Affairs Manager (SAM) is responsible for promoting safety and managing risk in our programs.

Faculty and Staff

SFS is designed to be a guided learning experience, emphasizing teaching and mentoring as the cornerstone of our educational model. We believe that learning professional field and problem-solving skills can only be achieved through close mentoring and training by highly-qualified staff. Each center is staffed by a Center Director and two to three full-time, resident faculty. Staff are selected based on their teaching and research qualifications, leadership skills and commitment to interdisciplinary, community-based field research. Most of our faculty are native to the country/region in which they are teaching.

Admission

We seek to put together a group of students who will work together as a team. The most successful teams are comprised of students who are motivated, intellectually curious, enthusiastic, flexible, compassionate, socially concerned and possess the maturity and personal initiative to take advantage of our unique educational opportunities. Programs fill quickly, so we encourage you to apply early to ensure admission into the program of your choice. Applications are reviewed on a year-round, rolling basis. (For further information, please refer to page 41).





Curriculum and Academic Credit

We offer intense immersion experiences in semester and summer programs at every SFS field station. Students in semester programs are enrolled in four courses of four credits each that average 95 days including a five-day midterm break. Summer courses are condensed, 30-day four-credit programs, and like our semester programs, are comprised of lectures, field exercises, research and field trips. SFS students are registered at and receive credit from Boston University, which accredits our programs. Most students from SFS Affiliate and Consortium schools receive credit directly from their home institutions. (For more information, please refer to page 44).

Program Costs

Our program fees cover tuition, room and board, program-related park entrance fees and ground transportation, field equipment, supplies, orientation and pre- and post-program advisory services. Program fees do not include transportation to and from the program. (For further information, please refer to page 42).

Financial Aid

On average, 50% of our students receive financial assistance from SFS or their home school to participate in our programs. If you need financial assistance, we strongly encourage you to request and submit an SFS Financial Aid Application as soon as possible. Qualifying students may use a combination of federal financial aid (Stafford Loans, Pell Grant and PLUS Loans), home school grants, SFS financial aid and scholarships to participate in our programs. You must apply early to be considered for SFS financial aid and you should consult with your home institution to determine whether you may use your institutional financial aid. (For further information, please refer to page 42).

Academic Program Structure and Content

Our academic programs are a unique approach to community-based environmental problem-solving. They are designed to train students to engage in high-quality field research that addresses the needs of the local community. The elements of our academic model fit together as follows:

Overall research direction: a multi-year research framework developed by SFS staff and local stakeholder communities to form the basis of our research and academic programs.

Field research projects and exercises: each student is engaged in a research project developed and led by faculty to advance the Center's research program and to train students in experimental design, field techniques, data analysis and scientific writing.

Case Studies: developed by the faculty team to give students an interdisciplinary and holistic understanding of the background, context and relevance of local environmental issues. Courses are delivered through this case study format.

Courses: led by individual faculty members to provide core lectures and academic activities needed to understand the content most pertinent to answering case study questions (courses include natural resource management, socio-economics/policy and terrestrial or marine ecology).

“My fellow students were incredible—I definitely made some friends for life.

The dynamics of the group were awesome; each student came from a different school in a different part of the country, all with unique backgrounds, philosophies and aspirations. Each brought his/her special touch to everything we did.”

—Sonia Leah Thompson
Kenya '99
Waukesha, WI
University of Wisconsin

Faculty Profiles

The SFS Faculty Team

Providing the context, knowledge and skills you need to understand and address complex environmental issues is the core of the SFS model. SFS faculty teams use field research, a low student-to-teacher ratio and close mentoring as the keys to developing the skills you will need to solve environmental problems. Every SFS field station is staffed with a Center Director and two or three full-time faculty who are trained in marine and terrestrial ecology, natural resource management, socio-economics and policy. Additional support is provided by student affairs managers, interns, site managers and local support staff.



Volker Koch, Ph.D., Marine Biology, University of Bremen (Germany), Center for Coastal Studies, Baja, Mexico

Volker did the fieldwork for his Masters studies in Costa Rica, where he worked on the population dynamics of mangrove snails. His Ph.D work was undertaken in a mangrove ecosystem in Northern Brazil, where he was involved in an interdisciplinary project to develop a sustainable management plan for the area. His work described and quantified the

energy flow characteristics of the dominant benthic species within the mangrove forest. In the past few years, Volker has participated in several expeditions on research vessels to Antarctica, Costa Rica and Namibia. His research interests include the dynamics of marine invertebrate populations, energy flow characteristics in marine ecosystems and steady state trophic modeling. Volker joined SFS in January of 2000.



Florentine K. Singarayer, Ph. D., Ecology, Curtin University (Western Australia), Center for Rainforest Studies, Australia

Florentine has a research background in Plant Ecology (Ph.D., Ecology of *Eucalyptus victrix* in flood plain in WA, M.Sc. Forestry - Phytosociological Analysis of loog TREF, Sri Lanka) and 3 years lecturing experience in Tropical Forestry Ecology. His main dissertation followed population structures of mature trees, sapling and seedlings and

investigated responses to flooding, demonstrating the morphological, physiological and anatomical adaptations. He also worked for the Tropical Weeds Research Centre, Queensland Government, Australia as a Weed Scientist. His current research interests include weed invasion in Tropical Rainforests and corridor management.



James Legilisho-Kiyiapi, Ph.D., Forest Ecology and Management, University of Toronto (Canada), Center for Wildlife Management Studies, Kenya

Kiyiapi received a B.Sc. with High Honors from Moi University in Nairobi, Kenya. Kiyiapi is a member of the Maasai community and was born and raised in the Transmara District of Kenya. His most recent research has focused on enhancing the role of non-wood tree products in livelihood strate-

gies of small holders in semi-arid Kenya. Kiyiapi was rated as one of the most popular guest lectures at SFS for several semesters before joining the permanent staff in the fall of 1998.



Arthur R. Bos, Ph.D., Estuarine Biology, Fisheries, Coastal Development and Management, University of Hamburg, (Germany); M.Sc., Aquatic Ecology, Coral Reef Biology, Wageningen Agricultural University, (Netherlands), Center for Marine Resource Studies, Turks and Caicos Islands

Arthur has strong international experience in research and teaching. He conducted research on the coral reefs of the Dutch Antilles, he was assistant-

lecturer at the "Third International Course on Data Handling in Tropical Fisheries" and he initiated and supervised hydro-biological and fisheries research on Lake Mweru and Lake Bangweulu in Zambia. At the University of Hamburg, he was responsible for the scientific research programs on fish populations in the River Elbe estuary and Wadden Sea. During this work, he completed his Ph.D. thesis on the ecology of the larval and juvenile stages of the European flounder. He taught students in marine biology, fish ecology, nature conservation, and participated in several EU-funded research projects. Arthur speaks several languages and is SCUBA certified. He joined SFS in September 2000.



Scott Wallace, Ph.D., Resource Management and Environmental Studies, University of British Columbia, Center for Rainforest & Fisheries Studies, British Columbia

Scott's research has focused on fisheries impacts on marine ecosystems and the use of marine protected areas as a tool for fisheries management and biological diversity conservation. His research includes ecosystem modeling and field-based surveys. His master's research was conducted at Dalhousie

University, Nova Scotia where he looked at marine protected areas as tools to manage two threatened species of cetacean, northern bottlenose whale and northern right whale. His undergraduate degree in biology is from Queen's University, Ontario. Scott joined SFS in Fall 1999.

"The faculty are not only extremely qualified to teach the material, but more importantly—they are genuinely devoted to teaching. They have a sincere desire to arm students with knowledge. The entire staff was dedicated to the program—it was very inspirational."

— Juliana Garzon
North Potomac, MD
Dartmouth College

Alumni Profiles



Jessie Bushell, Kenya '94
Education Specialist,
Animal Resource
Center, San Francisco
Zoo,
B.S., University of
California, Santa Cruz

As an Education Specialist
for the Animal Resource

Center at the San Francisco Zoo, Jessie Bushell has worked for six years delivering interpretive educational programs and supervising the Zoo's Teen Volunteer Program. This program consists of students who volunteer to teach the public about animals and conservation. Jessie participated in our Wildlife Management Studies program in Kenya in 1994.

An Interview with Jessie

SFS: *How did your SFS experience influence your ideas or beliefs?*

Jessie: My experience made me appreciate alternative views on animal management. Before I went to Africa, I was very against zoos and hunting. But after learning from the professors, working with the local community, and seeing life in Kenya first-hand, I began to understand the struggles the Maasai face. I became more open-minded about sustainable ways to preserve animals besides non-intervention.

SFS: *How has your SFS experience enhanced your career development?*

Jessie: Just being in Kenya and seeing animals in their natural habitats with the challenges they face was inspiring. The experience convinced me to get involved and help in some way. Before entering the program, I didn't think I'd want to teach. But in Kenya, I discovered how much I enjoyed working with local schools and teaching children about their own animals. I still enjoy teaching children and helping them to see animals and nature in a different way. I used to think I'd want to be a solitary field researcher, but now I realize that caring for animals and people are linked—they are interdependent. I feel like I'm really making a difference one person at a time.

SFS: *What advice would you give to new SFS students?*

Jessie: The more you can learn about the culture and the local language, the more you will get out of the experience. Communicate to people in their native language, respect local customs and mores—they will open up to you and look out for you.



Dorian Fougères, British Columbia '96; Australia '97

Ph.D. candidate, Department of
Environmental Science, Policy, &
Management at the University of
California at Berkeley

At 25, Dorian is well on his way down his chosen career path. As an undergraduate at Cornell University, he participated in a research internship at Cornell's program on Environmental Conflict Management. With a policy fellowship at the World Conservation Union (IUCN) in

Washington, D.C., already under his belt, he is currently a doctoral student in the Department of Environmental Science, Policy, & Management at UC Berkeley, where he has been researching live coral reef food fish trade in Southeast Asia.

Dorian studied at our Center for Rainforest Coastal Studies in British Columbia in '96 as well as the Center for Rainforest Studies in Australia in '97. Studying with SFS taught him that the experience of studying, researching and working with environmental issues in the field can provide

undergraduates with invaluable insight as they sort through myriad career options.

An Interview with Dorian

SFS: *How has your SFS experience enhanced your career development?*

Dorian: SFS gave me an opportunity to try out various fields and learn whether a certain career path held promise for me. For instance, I spent a lot of time working in rainforests, but after several months I knew my heart lies with coastal areas. Not only did first-class professors inspire me to match their level of scholarship and engagement, but I got the opportunity to meet and work with loggers, farmers, First Nations and Aboriginal people, scientists, businesspersons and a host of others involved in resource management. Meeting these people first-hand changed the way I viewed the dynamics of any resource conflict. They helped me realize I wanted to shift my own work in the direction of facilitation and mediation rather than continuing with activism—a decision I could not have felt so certain about had I not studied with SFS. My two SFS experiences were the basis for my honors thesis, which helped me graduate with a B.A. in Anthropology *summa cum laude*.

SFS: *Why did you choose SFS?*

Dorian: I wanted a study abroad program that let me actively engage in environmental issues, rather than just learn about them through coursework. In addition, SFS' incredible field sites appealed to me a great deal.

SFS: *What advice would you give to new SFS students?*

Dorian: Be patient in the field. It's easy to find fault and criticize colleagues, but much more rewarding if you can learn to work collaboratively with them. Finally, experience everything you can—who knows when you'll be lucky enough to visit some such wonderful place again!



Jessica Jay, Australia '87, Conservation
Attorney, Denver, CO, Bowdoin College
(BA); Vermont Law School (JD; Master
of Studies in Environmental Law)

Since attending the SFS Australia program as a high school senior, Jessica has enjoyed many personal discoveries and academic and professional accomplishments. Studying abroad at a young age helped Jessica focus on her goals with a certainty that comes from first-hand experience. As a conservation lawyer, she has published legal articles on, and speaks frequently about conservation issues at the state and national level, and she is active in giving guidance to the National Land Trust Alliance.

quently about conservation issues at the state and national level, and she is active in giving guidance to the National Land Trust Alliance.

An Interview with Jessica:

SFS: *How did your SFS experience influence your career development?*

Jessica: This experience really helped shape my resolve to be involved politically and professionally in conservation. During the time I was studying in Australia, conservation of the rainforest was a very politically charged issue. This tied in nicely with my interest in conservation and policy.

SFS: *Why did you choose SFS as a study abroad program?*

Jessica: I wanted to go to Australia and the interdisciplinary model of the SFS program made this an appropriate academic endeavor. I was able to combine my studies with an exciting travel opportunity.

SFS: *Reflecting back on your time in the program, what did you gain from your SFS experience?*

Jessica: Before I went on the program, I was hoping to be exposed to a different culture, to gain field experience and to go someplace new and see how other cultures dealt with environmental problems. In retrospect, I did

gain all that, but I was pleasantly surprised to see, at an early age, what it was like to be an American in another culture. I was able to compare American views against Australian—they are so different but each valid.

I was a high school senior when I participated in the Australia program, and my SFS experience really helped me focus during college interviews and helped me decide what I wanted to study in college. While talking with advisors, I told the story of my experience, which stimulated me to see how I could be helpful globally.

Alumni Counselors

A network of SFS graduates is ready and eager to share their experiences with you. To get a first-hand, student perspective, please call the SFS Admissions Office at 800-989-4418.



Safety is a Priority

Any educational experience, whether attending a college or university in the United States or studying abroad, carries with it inherent risks which could include injury, illness or even death. SFS has a detailed plan in place designed to address safety concerns. This plan includes providing students with safety information before they get to the field, minimizing risk while in the field and having contingency plans to effectively react to an emergency situation, should one arise.

Highlights of the SFS approach to program safety and risk management:

Safety Director: full-time professional focusing on managing the risks in our programs by promoting a high awareness of safety through training and risk assessment.

Safety Advisory Committee: comprised of experienced professionals with medical, international and outdoor program expertise.

Student Affairs Manager (SAM): responsible for promoting safety in our programs, with a SAM at each center. At a minimum, SAMs are trained as Wilderness First Responders (an 80-hour medical course). Other SAM training may include Wilderness EMT, Lifeguard, Emergency Water Safety, Rescue SCUBA Diver, British Canoe Union/American Canoe Association kayak training.

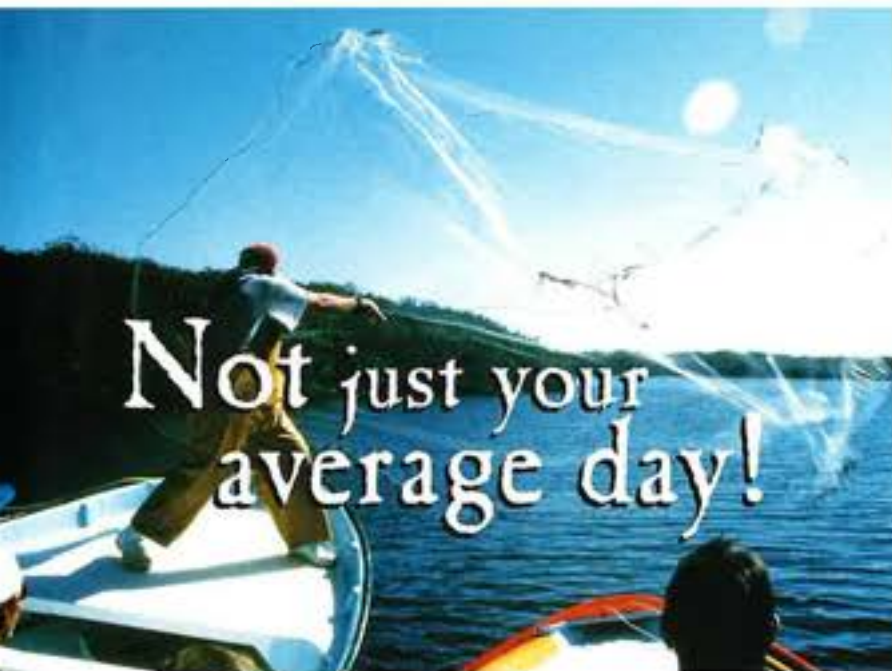
Detailed predeparture information includes: information on risks, safety and health issues; thorough on-site orientation to the country and community in which our students will be living; ongoing education on the potential risks and hazards, both physical and cultural, in students' environment.

Student Life: live and learn where you can make a difference.

SFS offers you a mutually beneficial experience. You will contribute knowledge and research that benefits the community in which you live. You will come away with memorable friendships, an appreciation of a different culture, first-hand knowledge of a unique ecosystem, academic credit and transferable career skills.

On an SFS program you will:

- Study in some of the most beautiful and threatened ecosystems in the world
- Visit people and places most tourists never get to see
- Learn from accomplished researchers and local experts
- Experience a new culture, develop friendships with local community members
- Gain valuable hands-on field experience, analytical skills and earn college credit
- Make a real contribution as you help solve environmental problems



Not just your average day!

Every day on an SFS program brings some new discovery, and usually, a greater sense of awareness and understanding of both yourself, and your surroundings. You will most likely realize new intellectual connections as you immerse yourself in our program experience. The following journal entry offers a glimpse into a typical student's day at the Center for Coastal Studies on Bahía Magdalena, Mexico.

5:30 a.m. Got up early to go fishing with a shrimp fisherman using a traditional hand thrown net. Saw lots of dolphins and got great data for our project on the ecological impacts of different types of traditional fishing gear.

8:00 a.m. Got back just in time for breakfast before a lecture on the economic importance of fishing to the community. Fishing or working in the local cannery are about the only job options here.

12:00 p.m. A visiting researcher gave a great lecture on the threatened green turtles in this area. Turtles face several threats in the Bay—some are caught in fishing nets and drown. The lecturer talked about some new types of fishing gear that can help prevent this from happening. One problem is that local small-scale fishermen can't afford new gear. Lack of money, also drives people to poach turtles for food. Next week we'll help tag turtles in order to monitor their movement and physiology.

4:30 p.m. Lunch was quesadillas, rice and beans—not bad! Spent the afternoon on a field exercise investigating sources of pollution into the bay. What a contrast to yesterday's trip to the mangrove forest and giant sand dunes. I hate to think how pollution can ruin that beautiful place.

6:00 p.m. Some of our group just finished (lost) a basketball game against the local team. Jason, Megan and I decided to take the kayaks out for a short (and beautiful) paddle. Off for a quick shower, then dinner.

7:15 p.m. Our research group met to write up the results of yesterday's field exercise. It was fun to sit with local people and learn about their lives—everyone is so friendly! My Spanish is getting better. (thanks to language tutorials we have), I can communicate pretty well.

8:30 p.m. Planned our next visit to the elementary school—we're going to use a scavenger hunt to teach the children about their environment.

9:00 p.m. Some students headed into town but I decided to hang out here. The moon is lighting up the Bay and there's a breeze blowing through our palm trees. I'm going to crash hard tonight! Tomorrow is another early one as we're loading up the boats (called pangas here) to head out to Isla de Magdalena where we'll camp and talk to villagers.

Centers & Semester Programs

Semester Program Structure and Content

Semester programs run for approximately 95 days including a five-day midterm break (an opportunity to travel on your own). We compress a 16-week semester into 14 weeks, so be prepared for an intensive but rewarding learning experience.

Elements of the SFS academic program:

Research Direction:

SFS staff, working with the local community, establish a multi-year research plan that drives the development of student Directed Research projects and field exercises.

Directed Research Projects:

Faculty guide and train students to conduct research, enter and analyze data and produce research papers addressing critical local environmental issues.

Case Studies:

Faculty teams give students an interdisciplinary and holistic understanding of the background, context and relevance of critical local environmental issues, that includes the ecology, management and socio-economic issues and field exercises.

Courses and Field Exercises:

Faculty provide the core lectures needed to understand the content areas pertinent to the Case Study and research questions (natural resource management, socio-economics and policy and ecology). Students are enrolled in four courses of four credits each.

Daily schedules vary. The first half of the semester includes approximately fifteen, 60-90 minute lectures a week plus 3-5 other academic activities (e.g., research/field exercise group meetings, presentations and guest lecturers). Afternoons are often filled with field exercises and field trips. Academic activities occur six days a week with at least part of one weekday devoted to a community service activity. Extended field trips, weather conditions and schedules of guest lecturers may impact the daily schedule.

There are fewer lectures and classes toward the end of the semester as more time is allocated for work on the students' Directed Research projects. Our centers are run as cooperative field stations, so we ask for your help with daily chores and weekly site clean up.

Sampling of field skills taught in our programs:

Animal behavior observations and population censusing; mark and recapture studies; radio tracking; habitat assessment; animal and soil identification; water sampling methods; hydro-acoustics; research mapping; timber estimation; transect and patch sampling.

Caribbean

Turks & Caicos Islands

The Center for
Marine Resource Studies





ive and snorkel in one of the most spectacular marine habitats in the Caribbean.

- Research innovative approaches to fisheries enhancement, marine park development and economic diversification.



- Get to know the friendly community known as “Belongers.”

“I was able to dive down to 80 feet, look up, and have the sun still hurt my eyes through water so clear. I saw sharks up to 10 feet long. I encountered schools of rays. I spent a week on an uninhabited tropical island camping with friends. I wrote a research paper, which may turn into a master's degree. I gained incredibly valuable research and field skills—most importantly, it reaffirmed my love and passion for my field of study.”

—Evan Larson,
Milaca, MN
Willamette University





Turks & Caicos Islands Semester Program

Environmental Issues

The British-governed Turks and Caicos Islands (TCI) lie at the southern end of the Bahamas chain, 100 miles north of the Dominican Republic. The turquoise waters surrounding the Islands are considered to be among the premier SCUBA and snorkeling locations in the Caribbean. More than 40 species of corals and 200 species of fish, including spotted eagle rays, sharks, groupers, snappers and mahi-mahi are easily spotted in the clear, warm waters just steps from our field station. Nearby seagrass beds, mangrove-studded woodlands,



sandy shoals and deep reefs lend a patchwork appearance to the miles of shallow blue waters that surround the Islands.

The Turks and Caicos Islands are a major international exporter of conch and spiny lobster. South Caicos has been the country's most important port for a fishing industry, which is the economic mainstay of this area. Depletion of this resource and its impact on employment and social structure has become a major concern. Developing sustainable fisheries is necessary for this community.

Many Caribbean communities have supported economic diversification to address sustainability concerns. One option is development, though it often leads to detrimental social, economic and ecological change. The spectacular marine environment draws developers whose actions will likely degrade the attributes that drew them there initially. Other means of economic diversification should also be explored, such as sport fishing for bonefish and harvesting finfish. The TCI must identify environmentally sound and sustainable community development strategies that are socially responsible and benefit local residents.

SFS in South Caicos

SFS students and staff are assisting the Department of Environmental and Coastal Resources (DECR) and the National Park Service in their efforts to develop and manage the fisheries, park and reserves for the benefit of residents and visitors without degrading valuable marine resources. With so many local residents dependent on marine resources for their livelihood, there is an immediate ecological and economic need to find viable options to manage these fisheries and reefs.

Snorkeling and diving in waters surrounding the island, students learn to identify a wide range of marine organisms and habitats and develop an understanding of marine ecology and coastal ecosystem functions. Students confront the challenges of fisheries management and the costs and benefits of potential new fisheries are analyzed. Assessing the pros and cons of resource management options and the social and economic costs of limited harvesting brings students face to face with dilemmas impacting the residents of South Caicos.

Recent research indicates that historical nursery areas in dense seagrass beds may be the most effective sites for stock enhancement of the economically important queen conch population. SFS students assist in the search for these previously undocumented sites. With the Admiral Cockburn Land and Sea National Park at their doorstep, students are ideally positioned to evaluate the emerging concept of Marine Protected Areas (MPAs) as a resource management option. Students are working with data gathered using the Atlantic and Gulf Rapid Reef Assessment (AGRRA) protocol to compare reef conditions inside and outside the park. Students also discuss the validity of indicator species for reef health, the effects of diver tourism, regional reef health, species interactions and the impacts of coral diseases.

SFS Field Station in Turks & Caicos Islands

Our field station is based just steps from our ocean laboratory and the 800-resident town of Cockburn Harbor. The main facility has a dining area, kitchen, classroom, library/computer area and

a veranda with spectacular ocean views. Students share living quarters in two newly renovated residence wings. We are fully equipped for marine operations with access to docks, motor boats, a commercial compressor and plenty of tanks and weights for SCUBA diving.



in Marine Resource Management Studies



Field Work and Field Trips

Days are spent in a combination of lectures, field trips, field exercises and research that focus on the development and management of fishery resources and the attractions offered by the spectacular natural marine environment (potentially drawing paying visitors). Faculty lectures provide the theoretical background for our studies. Students also meet with local experts including government officials, resource managers, researchers, fishermen, educators, community leaders and business owners during the semester. Nearby field sites include: fish-filled reefs; shallow banks; sea-grass beds; mangroves and beaches surrounding the island; the community of South Caicos.

Potential Field Trips:

- Boiling hole and salinas salt ponds: assess potential as ecotour attractions
- Bell Sound Bonefish Nursery and Marine Reserve boat trips
- Long Key and Ambergris Key: camping trips to explore the rich biodiversity of these uninhabited islands
- Meetings at government ministries in Grand Turk and Providenciales

Recent Student Directed Research Projects

Student projects focus on issues of concern to local resource managers and community members. Recent projects include:

- AGRRA for reefs inside and outside Admiral Cockburn Land and Sea National Park
- Population size assessment of potentially commercial finfish species around South Caicos
- Best practices zonations and utilization of National Parks' resources in TCI
- Queen Conch dispersal from nursery grounds: implications for designing no-take fishing reserves
- Bonefish protection on the Caicos Bank in Bell Sound Nature Reserve
- Spiny lobster assessment within the Caicos Bank

Community Involvement

The Center is steps away from Cockburn Harbor. Students quickly become involved with the community spending time with local residents, fishermen and resource managers. Community activities may include:

- Weekly soccer and basketball matches, which attract enthusiastic crowds, as SFS teams challenge local teams (usually unsuccessfully) for the coveted tournament trophy
- School volunteer projects such as tutoring, working with high school Science and Math Club
- Hosting SEA DAY at our field station to introduce elementary students to the marine environment.

Recent Center Contributions

SFS students come away with countless memories, new perspectives, skills and friends. They also leave something of value behind. SFS staff and students address timely issues relevant to the South Caicos community including:

- Lobster, conch and finfish stock levels assessment, which have provided important information for government agencies
- Natural resource workshop with DECR and the National Park Service to provide TCI government workers with educational training about coral reefs, lobster biology, marine fishes and turtles, sharks, whales and navigation



- Working with the DECR, National Park Service and local businesses to develop a protocol for coral reef monitoring to share data about queen conch distribution
- Hosting or supporting public forums and activities attended by government officials and community members to facilitate communal problem-solving
- Applying baseline data collected with the AGRRA protocol survey to examine reef health, species interactions and impacts of coral diseases.

We are very proud of what we have accomplished to date, but there are still many challenges to ensuring sustainable development for South Caicos Island.

SCUBA Certification

It is not necessary to use SCUBA to participate in our program. However, if you intend to use SCUBA you must be certified before arrival. Divers and snorkelers must bring their own SCUBA and snorkeling equipment. Weights and tanks may be rented on-site.

Semester Program Dates:

Spring 2002: February 1–May 6

Fall 2002: September 9–December 12

Semester students are registered in four academic courses accredited through Boston University:

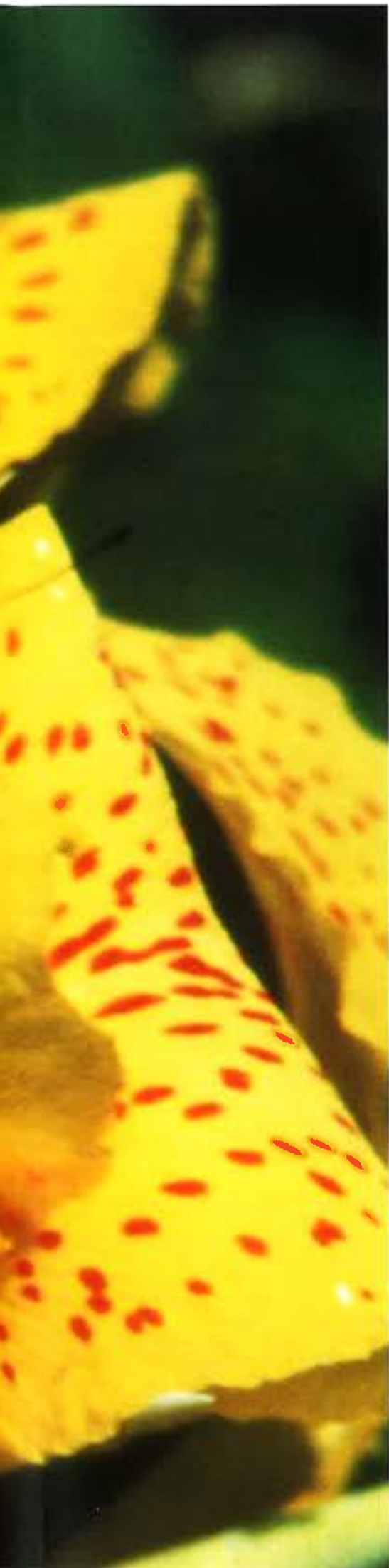
BI/EE (NS) 373 Tropical Marine Ecology
EE (NS) 374 Principles of Resource Management
EE (SS) 302 Environmental Policy and Socioeconomic Values
EE 491 or 492 Directed Research
Please see Page 32 for course descriptions.

Looking for a summer course option in Turks and Caicos Islands? Check out page 35.

Australia

The Center for
Rainforest Studies





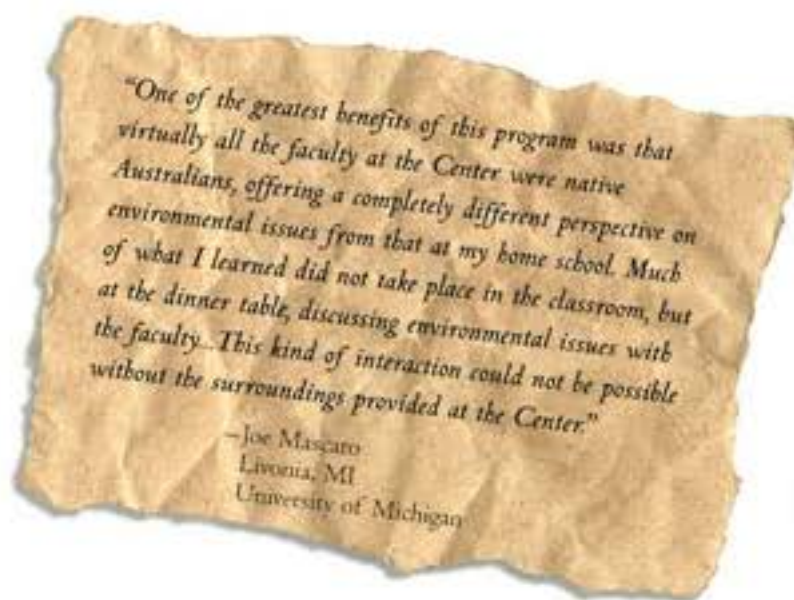
ive in a tropical rainforest amid an amazing variety of exotic birds, plants and wildlife.



- Work with local landcare groups and research organizations to manage forest resources.



- Participate in research projects to restore unique tropical rainforests millions of years old.
- Explore some of the most exciting natural wonders of Australia.



Australia Semester Program in Tropical Rain

Environmental Issues

Australia's spectacular tropical rainforests are home to primitive plant species, birds and marsupials found nowhere else in the world. Giant strangler figs standing 70 feet tall, crimson and green king parrots, sulfur crested cockatoos, rainbow lorikeets, bandicoots and tree kangaroos are just a few of the species filling these forests with color and sound.



The ancient rainforests of northeastern Queensland preserve millions of years of evolutionary history. Parts of Queensland were once covered in rainforests, but agriculture, ranching, mining and logging have destroyed and disrupted rainforest habitat, with only a narrow belt remaining along the eastern coast. Australia moved to confront these threats faster than most tropical countries, and much of its remaining forests were protected under World Heritage designation in 1988.

This decision was quite controversial as the country struggles with conflict between preservation and the immediate need to use natural resources. Many farmers wish to utilize environmentally sound measures, yet face the possibility of going out of business in the next decade due to economic pressures. If efforts to restore the rainforests of Queensland are to succeed, they must also provide economic benefits for the local community.



SFS in Australia

While representing only a small percentage of the world's rainforest, the astonishing biodiversity of Australia's rainforest has a unique significance in global conservation. Queensland presents an extraordinary laboratory to study this ecology and examine issues of rainforest management and restoration. A mosaic of protected lands, rainforests managed for sustainable use, reforested lands and degraded rainforest used for agriculture are found here. Local governments, resource managers and conservation groups struggle with revolving issues of ecology and economics. Australia's rainforest restoration efforts are representative of where many of the world's tropical rainforests will be in 20 to 30 years. The conservation challenges and cutting edge management strategies developed here will likely serve as a model for the rest of the world.

The ecological and economic benefit of rainforests are increasingly well known, but much less is understood about the ability to restore rainforest once it has been cut. This reality makes our work in Australia so important. Information about site management and maintenance strategies that foster restoration is also needed. Our goal is to benefit both ecosystems and human communities of the Tablelands. We are working with the Atherton and Eacham Shires (local governing bodies), research, extension and other local organizations as part of this research effort.

Students collect data on land use, local resident involvement in restoration projects, and cost effective and ecologically beneficial methods of restoration. Student work contributes towards developing a restoration plan for selected sites within the Atherton Tablelands. In addition, students are actively involved in rainforest replanting with local landcare groups.



SFS Field Station in Australia

Called "Warrawee," aboriginal for "You are welcome here," the Center lies in the northern foothills of the Atherton Tableland. Protected World Heritage forests and farm land surround the rolling, hilly site. A third of the property's 153 acres is mature rainforest, with the remaining area being forest regrowth. Student cabins are nestled within the rainforest, and sightings of tropical birds, bandicoots, pandemelons and other species of rainforest wildlife are common. Students share four- to eight-person cabins. The main building has lecture, computer, and library rooms and a kitchen. Faculty live in cabins on site.

Rainforest Management Studies



Field Work and Field Trips

Our days are spent in a combination of lectures, field trips, field exercises and research. We will compare and contrast the ecology and management strategies for various ecosystems throughout Queensland. Our research will enable us to interact with many local experts including resource managers, officials from government management agencies, researchers, farmers and aboriginal and community group leaders.

Potential Field Trips

- Mission Beach: examine the endangered Licuala palm forest and discuss how rainforest issues impact coral reefs (trip typically includes a nonscheduled program day where you can snorkel off the Great Barrier Reef).
- Chillago: camp in the Outback and explore caves, rock formations and eucalypt forests in a region once covered in rainforest. Learn firsthand about the history of the Aboriginals at Petford. Examine land management issues with members of the aboriginal community.
- Ancient Stockwellia rainforest: study additional examples of rainforest ecology. View plants and wildlife found nowhere else in the world.

Our fieldwork sites also include several rainforest and riparian habitats. Student Directed Research projects will focus on issues related to rainforest ecology, rainforest restoration and restoration management strategies.

Recent Student Direct Research Projects

- Vegetation monitoring of the Lakes corridor and two rehabilitated sites within
- Pre- and post-logging assessment and timber market analysis of Acacia dominated forest on Graham Cossin's Property, Danbulla
- Feeding ecology and use of rainforest and grassland habitats by the Blue Faced Finch
- Comparison of butterfly communities in replanted corridors and mature rainforest on the Atherton Tablelands
- Comparison of detritivore communities in replanted areas and rainforest on the Atherton Tablelands
- Ecology of wild tobacco in wet tropics of North Queensland
- Development of the Geographic Information System (GIS) mapping of the Center for Rainforest Studies property

Community Involvement

Conservation, resource use and rainforest restoration are extremely important to the local community. We interact with farmers, resource managers, the Yadinji tribe and members of community groups to help address these issues. We have established a professional Research Reference Committee to provide local academic and community access to SFS and its resources. We offer advice, based on our research, to local decision-makers on extension programs (principally for the Atherton Tablelands), and networking between our staff and local stakeholders involved in rainforest restoration and management. SFS involvement in community volunteer and social

activities may include:

- Working with local conservation groups and community to plant rainforest seedlings
- Sporting competitions with Aussies
- Bush dances, community festivals, visiting the Milanda theatre and several local pubs
- Short homestays that extend students' personal connections to the community.

Recent Center Contributions:

SFS students come away with countless memories, new perspectives, skills and friends. They also leave something of value behind. SFS staff and students have addressed several issues important to the people of North Queensland including:

- Development of a management plan for the Tolga Scrub, (a rare and endangered rainforest fragment), including weed control, replanting canopy gaps and creating an education program
- Ongoing monitoring of the floral and faunal succession of the Toohey's Creek Wildlife Corridor, representing one of the first scientific attempts in Australia to link forest fragments to facilitate the movement of wildlife
- Planting of over 10,000 trees grown from seed in the Center's shade house to restore degraded forests, improve water quality through plantings around watersheds and increase economic output through plantings on pasture lands.



We are very proud of what we have accomplished to date. There are many additional challenges to face, and we look forward to having your help in addressing these important issues.

Semester Program Dates:
Spring 2002: February 1–May 6
Fall 2002: September 9–December 12

Semester students are registered in four academic courses accredited through Boston University:

BI/EE (NS) 369 Rainforest Ecology
EE (NS) 370 Principles of Forest Management
EE (SS) 302 Environmental Policy and Socioeconomic Values
EE 491 or 492 Directed Research
Please see Page 32 for course descriptions.

British Columbia

Vancouver Island

The Center for
Coastal Rainforest
& Fisheries Studies





ive surrounded by a coastal temperate rainforest and a stunning ocean view.

- Learn forest management practices in one of the most actively debated areas of the world.

- Participate in a community-managed forest planning effort.



- Work with local conservation and community groups to revive salmon populations through stream restoration.

"After talking with my professors, I chose to go to the Pacific Northwest. The courses prepared me for the skills I'll need to get a job in the forestry field and SFS prepared me with the skills to confidently approach complicated environmental problems...the best learning experience I've ever had."

—Sean Libbey
Westwood, MA
Muhlenberg College



Vancouver Island Semester Program in Coastal

Environmental Issues

There is a growing urgency to protect and conserve the temperate rainforests in the Pacific Northwest. The future of this area is uncertain. These forests support some of the oldest and largest trees in the world and much of the world's remaining temperate rainforests are found along Vancouver Island's west coast. Forests of towering red-cedar, Sitka spruce and western hemlock are a haven for wildlife, including bald eagles, wolves and black bears. The coastal marine zone provides for abundant fish and seabird species, including five highly-threatened species of salmon, as well as marine mammals such as orca, porpoises and sea lions. Our field station in British Columbia is one of the best places in the world to study global forest and coastal resource issues.



The future of this area is also hotly debated—from logging camps and the homes of native peoples, to the seats of local government. The Clayoquot and Barkley Sound regions, rich in natural resources, are being exploited for their extremely valuable tree species and for their fish populations, most notably salmon and shellfish. Timber and fisheries provide the economic base for many people of this region, thus creating a heavy dependence on logging and related industries. Conflict between resource conservation and utilization is of deep concern for the local community.

Controversial land-use decisions have polarized not only the communities of Clayoquot and Barkley Sounds, but people across Canada and around the world for more than a decade. There is a great need here for social, economic and ecological data, problem-solving strategies and training in co-management techniques. The lessons learned here can help other communities face similar sustainability challenges.



SFS in British Columbia

The defense and conservation of coastal temperate rainforests is at the forefront of environmental commitment and controversy in the Pacific Northwest. This complex issue is at the center of debate between the indigenous First Nations groups, logging industries and scientific teams.

Appropriate natural resource management strategies must be based on an understanding of a series of complicated interrelationships within the coastal temperate rainforest environment. Logging practices have contributed to increased soil erosion and runoff, among other impacts, which then effect numerous creeks and rivers that traverse the landscape. These creeks and rivers then flow into the ocean, effecting nutrient-rich estuaries that support a variety of commercially important species such as salmon, further impacting this important ecosystem.

Students begin the semester by examining the interrelationships between forestry practices and fisheries management, and identify problems and issues of watershed management and stream restoration. Fieldwork and research enable students to study these interrelationships first hand, and learn transferable skills.

Students then focus on solutions and examine sustainable alternatives for the local community. Alternatives emphasize community-based economic diversification such as smaller-scale forestry and fisheries management practices. We explore non-extractive uses of natural resources such as tourism and shellfish aquaculture. The economic and ecological feasibility of watershed restoration is also examined.



SFS Field Station in British Columbia

Our Center is located in the small town of Bamfield, a community of both native and non-native people along Vancouver Island's rugged west coast. Our research base, accessible only by boat, is Aguilar House, overlooking Barkley Sound. It is a beautiful and remote location with pristine beaches and intertidal zones. Our main house has a porch overlooking the Pacific; dining/study/lecture area; living room with fireplace; library; and computer rooms. Students are housed in four large rooms, each with a bathroom. Faculty and staff live in nearby buildings.

al Rainforest and Fisheries Studies



Field Work and Field Trips

Days are spent in a combination of lectures, field trips, field exercises and research. Students will have the unique opportunity to speak with a diverse group of experts while they focus on community watershed planning and resource management. Local experts range from municipal foresters, representatives from logging industries, park managers, First Nation representatives, salmon fisherman, local artisans and community leaders. Students will visit temperate forests, lakes, beaches and coasts of the watershed and the islands near Bamfield as the basis for their fieldwork.

Potential Field Trips

- Carmanah National Park: multi-day camping excursion to experience some of the oldest and largest trees in the world and one of the best-known examples of successful community activism
- Sproat Lake: camping trip to experience first-hand how the logging and paper industry has affected the local ecosystem
- Port Alberni: introduces the economic and ecological challenges faced by the logging and tourist industry
- Tofino: field trip focusing on enhancement, mitigation and restoration options for fisheries

Recent Student Directed Research Projects

- Inventory of the Bamfield Community Forest
- Sockeye salmon spawning habitat and stream morphology assessment
- Monitoring stream restoration effectiveness in Sabrina Creek
- Monitoring aquatic macroinvertebrates to determine water quality in Sabrina Creek
- Assessment of aquaculture potential for the Sarita River Delta
- Examining biodiversity of Carnation Creek Estuary as baseline data for future development of shellfish aquaculture



Semester Program Dates:
Spring 2002: February 1–May 6
Fall 2002: September 9–December 12

Community Involvement

Students have numerous opportunities to integrate into the local Bamfield community. In addition to tutoring in schools, engaging in local sporting events and participating in community recycling efforts, students have hosted a variety of events for local residents including guided forest hikes, coffee-houses and picnics. Student research presentations at the end of the semester are an open community event.

Recent Center Contributions

SFS students come away with countless memories, new perspectives, skills and friends. They also leave something of value behind. SFS staff and students have addressed timely issues relevant to the Bamfield community including:

- Assisting Bamfield with a successful proposal to put a provincially managed woodlot under the community's oversight
- Developing recommendations for a management plan for the proposed Huu-ay-aht National Historic Site
- Creating guidelines for monitoring water quality in streams impacted by logging
- Implementing stream restoration efforts to improve diminishing salmon habitat.

We are proud of what we have accomplished to date but there are many more challenges to face, and we look forward to having your help in addressing these important issues.



Semester students are registered in four academic courses accredited through Boston University:

BI/EE (NS) 379 Coastal Ecology
EE (NS) 374 Principles of Resource Management
EE (ISS) 303 Economic and Ethical Issues in Sustainable Development
EE 491 or 492 Directed Research
Please see Page 32 for course descriptions.

Looking for a summer course option in British Columbia? Check out page 37.

Baja Mexico

The Center for
Coastal Studies





Explore incredible natural habitats ranging from flowering deserts to species-rich marine systems.

- Enjoy a warm welcome into the friendly community of Puerto San Carlos.
- Live surrounded by a cacti-strewn desert, mangrove filled lagoons and the incredibly biodiverse Bahía Magdalena.
- Help residents manage natural resources such as endangered sea turtles and marine mammals.



"My work in Baja didn't end when I boarded the plane back to the US. I saw how even little efforts on my part meant so much to the people of the area and allowed me to see some of the issues first hand---it made me want to try and help all the more."

—Sarah Scudder
Endwell, NY
Harvard University



Baja Semester Program in Marine Mammals

Environmental Issues

Bahía Magdalena, an area of profound physical beauty, is among the largest remaining intact coastal wetland/lagoon systems along the Pacific coast of the Americas. Diverse habitats include extensive sea grass beds and mangrove stands, intertidal sand and mudflats and large rocky shore areas on the Pacific side of the barrier islands of Magdalena and Margarita. Large populations of bottlenose dolphins and sea lions are common sights. The Bay is an important feeding ground and nursery area for East Pacific green turtles, Loggerheads, Olive Ridleys and the rare Hawksbill turtles. Over 100 species of migratory and resident birds use the Bay at various times of the year. Perhaps the most spectacular of the Bay's inhabitants are the California Gray whales. Bahía Magdalena is one of the three most important calving areas for the entire California Gray whale population, and hundreds of these animals can be found here between January and April.

For generations Bahía Magdalena has also played a critical role in supporting its human residents. A growing tourism industry, supported largely by whale watching, provides income for many residents. Fishermen ply the waters for commercially important species, including sea turtles which has critically endangered the already threatened species. Pollution threatens the water quality of the Bay. Whale watching has dramatically increased boat traffic and potential disturbance of the gray whales. With many fisheries near collapse from over-harvesting, the commercial harvesting of several species has been banned, but the harvest continues.

Most residents of Puerto San Carlos are economically dependent on the Bay's marine resources, yet little research has been done on the ecosystem of the Bay and the ways in which its resources may be best utilized. Due to its high productivity and amazing biodiversity, the World



Wildlife Fund has ranked the Bay as one of the nine most important coastal habitats to protect in all of Mexico. There is consensus among researchers, NGO's and U.S. and Mexican governments that protection of this unique ecosystem is urgent. The question remains—how can conservation and economic development be balanced to the benefit of all of the Bay's residents?

SFS in Bahía Magdalena

Our semester program offers students a number of fascinating areas of study. In addition to our year-round interests in critically important fisheries management and water quality issues in Bahía Magdalena, our unique location allows us to focus on different but similarly threatened species each semester. The spring semester focuses on applied ecology of marine mammals, specifically the gray whales. Since commercial whaling was banned in 1946, the gray whale population is thought to have recovered to near 20,000 whales. Only three calving and breeding grounds for this species are known to exist and Bahía Magdalena is the only one not currently protected.

Students in the fall and summer semesters explore conservation strategies to protect several marine turtle populations rendered to near-extinction levels in the Bay as a result of exploitation and incidental capture. Marine turtles traditionally have been exploited for their meat and eggs and are frequently harvested unintentionally as bycatch. Currently there is no comprehensive recovery plan for the sea turtles in Bahía Magdalena. SFS student research contributes to an understanding of sea turtle ecology and will be used in population recovery and protection plans.

Other research activities relate to the sustainable harvest and management of important commercial fisheries and marine resources. Resource dependent communities often increase the exploitation of their resource base in their quest for economic growth, as has been the case in Bahía Magdalena.

Despite its importance, little research has been done on fisheries management here. SFS students are interviewing fisherman, exploring changes in fishing technology and collecting and analyzing catch data as part their efforts to identify alternative management strategies for the small- and large-scale fisheries of Bahía Magdalena. Our research also focuses on the effects of pollution, which especially threatens the mollusk and crustacean fisheries.



SFS Field Station in Baja

Our field station lies on the outskirts of the fishing community of Puerto San Carlos on the west coast of the Baja peninsula. Bahía Magdalena runs for 200 km along the west coast. Our two-acre property is surrounded by the Bay and nearby mangrove-laced lagoons, which give way to white sand dunes backdropped by a colorful, cacti-strewn desert. Spectacular sunsets drape the mountains and dunes of the off-shore islands in orange and purple shadows. Students share 4-person, solar-powered cabins. Additional facilities include a computer room, library, classroom, laboratory, kitchen, dining and study areas and a bath/shower house serviced by our wetland waste water treatment system. Faculty live in small cabins on site.

Conservation & Coastal Ecosystem Studies



Field Work and Field Trips

Days are spent in a combination of lectures, field exercises, field trips and research. In addition to lectures by Center faculty, local experts including resource managers, university faculty, researchers, representatives of conservation initiatives and local employers, tourism operations, fisherman and community leaders provide background for our research. Field work takes place on the beaches and in the communities of Bahía Magdalena. Small boats called "pangas" facilitate exploration of nearby islands, mangroves and coastal waters.

Potential Field Trips

- Puerto Magdalena: visit traditional fishing families on a boat trip to this small island fishing village
- Estero San Buto: experience examples of alternative fisheries at an aquaculture farm
- Punta Santa Maria: intertidal zones illustrate the incredible diversity of marine life in this region
- Offshore Islands Camping trips: explore the area's rich biodiversity, stark dunes and sandy white beaches

Recent Student Directed Research Projects

- Economic benefit and socio-economic analysis of whale-watching in Bahía Magdalena
- Designing a regionally appropriate sea turtle protected area
- Monitoring anthropogenic impact on the water quality of Bahía Magdalena
- Gray whale abundance, distribution and behavior during breeding season in Bahía Magdalena
- Regional environmental education model: marine mammals as a tool for getting teachers involved in curriculum development

Community Involvement

This program is oriented toward helping the community conserve its natural resources and develop sustainably, therefore students spend significant time working within the local community of Puerto San Carlos. In addition to working with local clients and interviewing community leaders, there are many opportunities to become involved in local social activities:

- Informal Spanish lessons throughout the program help sharpen conversational skills
- Students participate in local sports, community meetings, conservation activities and developing environmental education programs in schools
- Participation in Mexican holiday celebrations
- A short homestay to expand students' connections to the community

Recent Center Contributions

Opened in early 1997, our field station was funded, in part, by one of the first-ever debt for environmental education swaps. As the only permanent field station on the Bay, our Center has drawn many researchers from Mexico and abroad, involving SFS students in several important investigations such as:

- Gray whale population study which led to an increase in whale-watching permits for local boat operators
- Management plan for regional sustainable development created by a student-initiated, community-based conservation plan
- Joint SFS, Government and local fishers' exploration of alternative shrimp net designs to reduce by-catch and destruction of the fragile bay bottom
- Socio-economic analysis of blue crab fishery, providing valuable data to the Puerto San Carlos Office of Fisheries to assist in the development of management strategies for this critical resource
- Water quality analysis project on wetland contamination, which resulted in the development of a monitoring program and alternative disposal recommendations.

We are very proud of what we've accomplished to date, but there are still many challenges to preserving the Bay's biodiversity and ensuring sustainable development for the communities of Bahía Magdalena.

Special Note:

Due to our community focus and extensive interaction with the people of Puerto San Carlos, who appreciate attempts to converse in Spanish, applicants are strongly encouraged to develop their conversational Spanish skills.



Semester Program Dates:
Spring 2002: February 1–May 6
Fall 2002: September 9–December 12

Semester students are registered in four academic courses accredited through Boston University:

BI/EE (NS) 379 Coastal Ecology
EE (NS) 374 Principles of Resource Management
EE (SS) 303 Economic and Ethical issues in Sustainable Development
EE 491 or 492 Directed Research
Please see Page 32 for course descriptions.

Looking for a summer course option in Bahía Magdalena? Check out page 38.

Costa Rica

The Center for
Sustainable Development
Studies





Explore Costa Rica's biodiversity and threats to the preservation of its unique ecosystems.

- Investigate natural resource management challenges in world-renowned protected areas.
- Work with local cooperatives to identify innovative sustainable development options.
- Immerse yourself in the warm and welcoming community of Atenas.



"In conversations with other travelers we soon became aware of how special our experience was as they talked of overcrowded places. We were able to have lecture bikes through rarely visited cloud forest, live in a cabin in the rainforest and visit remote communities."

—Carly Anderson
South Windsor, CT
Emory University





Costa Rica Semester Program in Sustainable

Environmental Issues



Costa Rica is internationally recognized for its efforts to ensure biodiversity and protect natural resources. The country boasts 230 different protected areas (about 28% of the country), ranging from completely protected reserves to national parks where research, tourism and controlled development and extraction are permitted. The cloud forests, rainforests, volcanoes and mountain plains here shelter as many as 6,000 plant species, including at least 1,000 orchid varieties alone. The presence of over 500 species of butterflies has led to profitable "butterfly ranching" while more than 800 bird species—quetzals, toucans, hummingbirds, scarlet macaws—are found in the wet and dry forests. The magnificent beaches bordering both coasts are among the world's largest-known nesting grounds for sea turtles.

Costa Rica now faces a struggle common to developing countries: how to preserve beautiful (and economically valuable) natural resources while increasing prosperity. Within the protected zones, resource managers and residents are particularly aware of the challenges of safeguarding biodiversity and contributing to sustainable development. Appropriate regional and local alternatives and strategies are required to ensure long-term sustainability. Eco-tourism has been hailed as a possible alternative, although it is unclear if this is a sustainable solution. Another challenge is maintaining biodiversity in the face of competing land use, such as agriculture.

Traditional agricultural practices have resulted in numerous problems, such as soil erosion, runoff and water contamination from pesticide use. Agroforestry and organic farming may be more environmentally friendly, but these options must also be economically viable in order to be sustainable.



SFS in Costa Rica

Costa Rica is currently undergoing a period of great economic and social change. In our ten years at this Center, the country has shifted from an economy predominately based on agriculture, to an economy driven by eco-tourism and technology exports. The fiscal and cultural transition makes this a very exciting and rewarding time to be studying here.

Our overall goal is to develop sustainable management models that promote biodiversity protection and ecosystem integrity. Our research will focus on determining the ecological and economic viability of organic agriculture and developing protected area management strategies that enhance biodiversity and protect natural resources.

Students quickly realize that agriculture is in a period of transition. While some residents pursue other occupations, agriculture, such as coffee farming, is still an important component of the Atenas economy. Groups of coffee farmers are organized into cooperatives, some of which have been working with SFS to explore the viability of organic farming as an alternative to traditional farming. Students work with the local CoopeAtenas (coffee cooperative) to investigate organic coffee production costs, marketing, pest management and species diversity. All of this information helps local farmers obtain national certification as organic farms, and measures the stability of organic farm ecosystems.

Students also explore protected areas to collect data on biodiversity, and evaluate the success of different management strategies. Visits to cloud forests, dry forests, volcanic parks and lowland rainforests offer the opportunity to examine management schemes and determine which systems offer the best option for economic development, the maintenance of cultural norms, and the preservation of biological diversity. The Center is collaborating with the ministry of Energy and Environment to expand our studies of the Central Volcanic Mountain Range and Conservation Area.

Our Goals

- Develop trail impact assessment and interpretation programs
- Identify the services/benefits local residents receive from protected areas
- Develop and implement programs to monitor biodiversity protection status.

SFS Field Station in Costa Rica

Our base is a small farm on a hillside with spectacular views overlooking the Rio Grande river in the fertile Central Valley. The property includes a large house surrounded by small faculty cabins, an outdoor classroom, an organic garden, orchards, a patio and pool. Students live in a brand new dormitory (up to 4 to a room) with bathrooms. There is a classroom, small laboratory and a library/computer room. We look out over green hillsides dotted with farms growing coffee, mangoes, bananas and citrus. The friendly community of Barrio Los Angeles is a short walk from the center while Costa Rica's tropical forests, beaches, mountains and volcanoes are within a day's travel.



Development Studies

Field Work and Field Trips

Our days are spent in a combination of lectures, field trips, field exercises and research. As we examine the ecology and management success of protected areas and the viability of organic agriculture, we shall explore diverse ecosystems, meet resource and park managers, officials from government management agencies, researchers, farmers, cooperative members, representatives of multi-national corporations, community leaders and local grassroots organizers.

Publicly and privately managed protected areas include national parks, forest preserves, conservation areas and protected zones.

Potential Field Trips

- **Santa Rosa National Park:** camping trip to explore a tropical dry forest ecosystem that is rarer and more threatened than better-publicized rainforests; site of one of the biggest forest restoration projects in Latin America
- **Volcano Poas:** the country's first volcanic national park
- **Braulio Carrillo:** national park encompassing a wide range of altitudes, ecosystems and a huge variety of plant and animal life
- **Reserva Biologica Carara:** Pacific coastal rainforests offer additional lessons in biodiversity; home to monkeys, sloths, scarlet macaws and crocodiles
- **Monteverde Cloud Forest Preserve** and butterfly gardens

Our field work sites also include local coffee plantations, farms, preserves, forests and the communities of Atenas. Student Directed Research projects focus on issues of concern to the local community.

Recent Student Directed Research Projects

- Assessing ecological indicators of restoration in Atenas coffee groves during transition from conventional to organic cultivation
- Planning ecological restoration and protection of biodiversity in the Atenas Watershed
- Integrated pest management in annual crops
- Energy flows in natural and managed ecosystems

Community Involvement

Community land-use choices are among our chief concerns. Therefore, we spend significant time with local residents, farmers and agricultural cooperative members to better understand their perspectives and needs.

Students become involved in local social activities, such as:

- Informal Spanish lessons throughout the program to help sharpen conversational skills
- Soccer games, community festivals, tutoring in schools, volunteering in orphanages, establishing recycling efforts
- Costa Rican holiday celebrations; hosting local residents at our Center events
- A short homestay to expand students' connections to the community.

Recent Center Contributions

SFS students come away with countless memories, new perspectives, skills and friends. They also leave something of value behind. SFS staff and students have addressed timely issues relevant to communities in Costa Rica and have led to the development of:

- Developing and testing organic farming protocols with Coopeatenas farmers, supported by a grant from Hewlett Packard
- Environmental waste management and recycling education programs in Atenas
- Operational management plan for two protected areas: Cerro Atenas and Rio Grande in one of the most important watersheds in Costa Rica
- Profile of customer awareness and attitudes towards organic products for use by NGO's and local farmers
- Guidelines for protecting Costa Rican wildlife in captivity.

We are very proud of what we have accomplished to date, but there are still many challenges to preserving biodiversity and ensuring sustainable development for Costa Rica.

Prerequisites

Applicants must have completed a college level course in ecology or environmental studies. Participants are encouraged to have taken coursework in international development, economics or anthropology. Students must have completed at least one college level course in Spanish or otherwise demonstrate a working knowledge of conversational Spanish prior to participating.



Special note:

A portion of semester program spaces are reserved for applicants from University of Michigan and Allegheny, Colby, Dickinson and Middlebury Colleges. These applicants should consult their Environmental Studies Department for application information.

Semester Program Dates:

Spring 2002: February 1–May 6

Fall 2002: September 9–December 12

Semester students are registered in four academic courses accredited through Boston University:

- EE(NS) 377 Tropical Ecology and Sustainable Development (4 credits)
- EE(SS) 303 Economic and Ethical Issues and Sustainable Development (4 credits)
- EE(NS) 374 Principles of Resource Management (4 credits)
- EE 491 or 492 Directed Research (4 credits)

Please see Page 32 for course descriptions.

Looking for a summer course option in Costa Rica? Check out page 39.

Kenya Africa

The Center for
Wildlife Management Studies





live in close proximity to wildlife and local Maasai communities on an African savanna.

- Study and research at the base of Mt. Kilimanjaro and in national parks.



- Explore human-wildlife conflicts from the perspective of local ranchers, communities and park managers.
- Visit areas of Kenya and meet residents inaccessible to most tourists.

"One of my life's dreams was to study in Africa... SFS hosted an outstanding program. While the program allowed students to study and observe the animals we have grown to love, it also immersed us in Kenyan culture. The facilities, especially the location, finalized the experience of living a dream. Personally, my experience can be described by one word—amazing."

—Michael Simmons
Parkesburg, PA
Penn State University



Kenya Semester Program in Wildlife Ecology

Environmental Issues

Modern pressures and the country's soaring population increasingly threaten the habitat required by Kenya's wildlife. Lions, elephants, giraffes, rhinos, monkeys, zebra and other indigenous wildlife are the country's most famous and economically valuable resource. At the same time, many Kenyans struggle to raise enough food to survive, as farmers are forced onto land that is marginal or unsuitable for agriculture and traditional pastoralist lifestyles. Previously nomadic peoples, such as the Maasai, and the cattle herds they depend upon, have been confined to smaller plots of land, resulting in overgrazing and rangeland devastation. The wild animals, which have co-existed for centuries with these non-hunting people, are now seen as competitors for scarce water and grazing resources.



Parks and reserves that offer protection to wildlife are becoming more and more isolated. Buffer zones surrounding the protected areas are being converted to food production. Reduced habitat undermines the long-term viability of Kenya's irreplaceable wild animal populations and the booming tourist industry they support. The search for ecologically appropriate solutions to the conflict between food production and wildlife habitat is urgent.

SFS in Kenya

Our current research focuses on exploring ways in which Kenya's wildlife resources can be both conserved and utilized as an income source. Identifying appropriate land-use practices that enable local residents to maximize production without degrading their environment is another priority.

While based at the National Park Camp, students focus on management strategies for Kenya's oldest and most profitable national park. Increased development around Nairobi National Park (NNP) threatens its biological welfare and has led to the decline of large mammal populations. Pollution threatens the water supply and plays a role in the death of numerous birds and animals. Increased human and livestock populations in areas surrounding the park are leading to intensified human-wildlife conflicts including disease and destruction of crops by migrating wildlife. SFS students are assisting

the Kenya Wildlife Service (KWS) and managers of the Park through a series of research projects, including vegetation mapping; grass and browse impact surveys; large mammal population counts and distributions; educational facility upgrades and human impact monitoring in the Park.

The diverse habitat surrounding the Kilimanjaro Bush Camp is used by wildlife as a migration corridor between Tsavo and Amboseli National Parks. Maasai primarily use this area as a communal grazing zone for livestock. As a result, residents often face economic hardship due to crop damage and loss of livestock inflicted by migrating wildlife. Students will engage in an ecological and land-use characterization of the area. Through interviews with Maasai residents, students gain a perspective on the priorities and challenges of addressing wildlife conservation among resource-constrained communities. This research is a critical first step in developing integrated land-use strategies that will enable residents to derive optimal benefits from their land and forestall additional fragmentation of key wildlife areas.

SFS Field Stations in Kenya

Students have the incredible opportunity to conduct research from two prime locations. Our National Park Camp is located on 60 acres of the Athi-Kapiti plains on the Southern border of Nairobi National Park. The combination of rocky outcrops, riverine vegetation, bushland and open grassland support an amazing range of biodiversity. From the plateau and ridge above the camp one can look down into the park and spot giraffe, buffalo, rhino, zebra, cheetah, lion and even leopard. The Ngong hills and the Mbagathi River are also within view, where wildlife commonly cross between the park and dispersal area.

Kilimanjaro Bush Camp is located approximately 215 km southeast of Nairobi. Twenty-five acres of fenced land sit at the foothills of Mt. Kilimanjaro and border a permanent river fed by natural springs. Adjacent to the river is a lush zone of yellow Acacia trees, with clear undergrowth giving a perfect view of the magnificent vegetation mosaic. Across the river is Kimana High School, where SFS students will have a rare opportunity for cultural exchange with Kenyan youth and to visit nearby Maasai *bomas* (villages).

At both field stations, students sleep in thatched-roof *bandas*, with a main building, or *chumba*, which houses a dining room, kitchen, classroom and library. Additional facilities include a *duka* (shop), *choos* (outhouses) and open-air showers.





Field Work and Field Trips

At both the Kilimanjaro Bush Camp and the National Park Camp, our days are spent in a combination of lectures, expeditions, field exercises and research. Field trips enable us to compare and contrast the success of various management schemes.

Potential Field Trips

- **Maasai Mara:** multi-day field trip—frequently includes sightings of lions, leopards and buffaloes and a visit to the hippo pools. Cries of hyenas can be heard at night while students conduct vegetation analyses comparing fenced and open grazing areas by day.
- **Manyatta:** rare opportunity to glimpse Maasai culture including rural settlements not usually visited by tourists. Recent trips have involved students in a musical ceremony by Maasai women, demonstrations in fire-making, dances by Maasai morans (warriors) and lessons in spear throwing.
- **Amboseli and Tsavo National Parks:** multi-day excursions illustrating the management implications of high concentrations of animals in a confined area. The impacts of the elephants, whose trumpeting punctuates the night, are clearly visible by daylight.

Recent Student Directed Research Projects

- Population Dynamics, Distribution and Vegetation Preference of Specified Fauna Residing in Nairobi National Park
- Rangeland and Grazing Capacity Assessment of the Grasslands of Nairobi National Park
- Land Use Patterns and Human Wildlife Relations in the Southern Dispersal Corridor of Nairobi National Park
- Wildlife Density and Diversity in Kuku Group Ranch and Assessment of Community Support for a Sanctuary
- An Assessment of Land Productivity, Water Use Efficiency, and Related Economic Implications within the Inkisanjani Agro-Pastoral Zone

Community Involvement

One of our primary goals is to understand community views on wildlife, the challenges faced, and management policies employed by park managers. Therefore, involvement with Kenyans is key to our research. We maintain close ties to local community members, including park wardens, ranchers, farmers, pastoralists and others. In addition, students can take advantage of many opportunities for social interaction including:

- Discussions with Center staff who come from various regions of Kenya and belong to several Kenyan tribal groups including Kamba, Maasai and Luo
- Informal lessons in Swahili and Maa
- Manyatta visits with the Maasai in areas off the regular tourist routes
- Community service work in local schools.

Recent Center Contributions

SFS students in Kenya leave with countless memories of a different culture, new perspectives on solving environmental problems and long-lasting friendships. They also leave behind many valuable hours of fieldwork and research. SFS has been in Kenya since 1981 and has contributed to management plans for game ranches, several Maasai group ranches as well as national protected areas such as Nairobi National Park. Other contributions include:

- Assessment of the socio-economic impacts of the Kimana Wildlife Sanctuary, the first private reserve operated on a Maasai group ranch. Ranch managers are using these data to develop sustainable management policies.
- Collaboration with local Maasai and the KWS to conduct the first assessment of water and grazing resources in the Ngong Hills. Decisions regarding stock rotation and use of pasturelands were based on their findings.
- An analysis of 17 years of data on Thomson's gazelle to identify possible reasons for a recent population decline. Data suggest that the decline is due to predation on juveniles.
- Assistance in building a library in the town of Magadi and teaching the local schoolchildren about the environment.

We are very proud of what we have accomplished. We hope you will join us to address the many remaining challenges to sustainable wildlife management and reducing human wildlife conflicts.



Semester Program Dates:
Spring 2002: January 29–May 6
Fall 2002: September 6–December 12

Semester students are registered in four academic courses accredited through Boston University:

BI/EE (NS) 371 Techniques of Wildlife Management (4 credits)
BI/EE (NS) 372 Wildlife Ecology (4 credits)
EE (SS) 302 Environmental Policy and Socioeconomic Values (4 credits)
EE 491 or 492 Directed Research (4 credits)
Please see Page 32 for course descriptions.

Looking for a summer course option in Kenya? Check out page 40.

Semester Course Descriptions

BI/EE (NS) 371 Techniques of Wildlife Management introduces students to the questions, principles and tools used by resource managers in the Kenyan savanna ecosystem. Students study habitat assessment, plant and animal identification, associations and distributions and other approaches to evaluating the savanna ecosystems. Behavioral, physiological and social responses of animals to a changing environment will be examined. Field and laboratory techniques for monitoring ungulate populations and optimizing management practices will be presented. Decision-making processes, on which wildlife management programs are based, will be addressed.

BI/EE (NS) 372 Wildlife Ecology presents students with the information and conceptual background necessary to understand the underlying ecological principles of the East Africa savanna ecosystem. We will focus on the fundamental processes and inter-relationships between the biotic and abiotic environment. We begin with basic ecological principles, setting them against the background of East Africa. Factors underlying distributions, population biology and behavioral ecology will be examined along with competition and predation using African examples. Theoretical models will be discussed in light of our observations on field trips.

BI/EE (NS) 373 Tropical Marine Ecology discusses the interactions that determine the distribution and abundance patterns of tropical marine organisms, with emphasis on the ecology of near-shore areas. Basic principles of ecology are integrated with an understanding of the sea as a habitat for life. Physical, chemical and geological oceanography are discussed. Major groups of dominant marine organisms of the region are examined in the field. Major near-shore marine habitats are examined, along with their associated biotic communities. Coral reef ecosystems are emphasized to illustrate basic concepts. Applications to the management of indigenous marine resources are discussed and demonstrated.

BI/EE (NS) 369 Rainforest Ecology introduces structure and function of tropical rainforests including floral and faunal components. Ecological processes that maintain biodiversity and the evolutionary processes that generate it will be presented. We will examine the dynamic relationships between plants and animals including pollination and seed dispersal. On a larger scale, we will examine tropical vegetation patterns along climatic gradients and discuss mechanisms for preserving and restoring tropical ecosystems.

EE (NS) 370 Principles of Forest Management presents the ecological and analytical tools used in the management of terrestrial, living resources. We will use examples from the tropics to stress the theories and skills that provide the foundation for land management worldwide. The assessment and minimization of adverse environmental impacts caused by resource development, as well as the restoration and rehabilitation of areas suffering from chronic human induced disturbances, provide key foci for applying principles learned.

EE (NS) 374 Principles of Resource Management introduces practical tools used in addressing complex environmental problems including coastal zone planning, guidelines for ecologically sustainable development, environmental impact assessment, fisheries management and protected-area planning and management. We will review these tools in terms of their application to local issues and to Case Studies from the Caribbean, the United States, Central America and East Africa.

EE (NS) 377 Tropical Ecology & Sustainable Development examines the ecological impact of human activity, especially agriculture in a tropical country. The agroecology of important crops will be studied with emphasis on biodiversity as the source of production means and materials. Students will identify renewable and nonrenewable resources and examine their historical use. We will study the long-term and large-scale impact of local agricultural and other practices on the national and global environment (e.g. water pollution, waste management, climate change). Options for alternative resources use, land restoration and preservation will be examined from ecological, socio-political and economic viewpoints. Factors that constrain or promote particular options will be included. Basic field techniques and measurements will also be covered.

BI/EE (NS) 379 Coastal Ecology examines the ecological processes interface between land and sea in order to understand how human perturbations impact both marine and terrestrial systems. The watershed concept will be used to explore nutrient flow, energy cycling, coastal circulation, productivity and biotic interactions. This course provides a basic understanding of how natural systems work in order to help guide resource managers toward ecologically sound and sustainable decisions. Fieldwork exposes students to techniques of surveying, monitoring and the study of biotic interactions in a complex physical/chemical milieu.

EE (SS) 302 Environmental Policy & Socioeconomic Values provides insight into the broad social context surrounding natural resources to determine effective approaches to resource management. Objectives are to understand sociocultural context including hierarchies and power structures; formal and informal decision making processes; value systems relevant to natural resources including religious factors and environmental ethics; past and present uses of natural resources; economic factors (local, regional, external); ownership patterns; attitudes and other factors that affect change and their historical basis; and legal basis for enforcement of environmental policy. Introduction of major constituencies which effect conservation (NGO conservation groups, economic interests, etc.) and their underlying philosophies.

EE (SS) 303 Economic and Ethical Issues in Sustainable Development addresses the principles and applications of Ecological Economics, or the scientific and management aspects of sustainability. Allocation, distribution and scale will be presented as parameters to assess the sustainability of development models (at a macro and micro level). Basic concepts of ecological economics cost-benefit valuation techniques will be presented and applied. The roles of local people, government, and private, national, and bilateral aid agencies will be examined as constraints for the implementation of sustainable development models. The empowerment of local people and their reaction to non-local proposals for sustainable development will be examined through the review of specific Case Studies.

EE 491 (Fall) EE 492 (Spring) Directed Research prepares students to distinguish hidden assumptions in scientific approaches and separate fact from interpretation, cause from correlation and advocacy from objectivity. Specific tools will include experimental design, field techniques, basic descriptive statistics and parametric and non-parametric quantitative analysis. Succinct scientific writing, graphic and tabular presentation of results and effective delivery of oral presentations will be emphasized.

BI/EE (NS) –Students choose to register for either
Biology or Environmental Studies credit
EE (NS) –Environmental Studies (Natural Science)
EE (SS) –Environmental Studies (Social Science)

Summer Programs

SFS Offers 30 day
Summer Programs In:

Australia

Baja Mexico

Costa Rica

British Columbia

Turks & Caicos Islands

Kenya

- ✳ Gain hands-on field experience
- ✳ Experience new cultures
- ✳ Make significant contributions toward critical environmental issues
- ✳ Learn field research and decision-making skills that will last you a lifetime

Summer Programs

Summer courses are intense 30-day immersion experiences combining lectures with field exercises, research and expeditions. Like SFS semester programs, summer courses are high-quality interdisciplinary academic programs offered for college credit. Our classrooms include coral reefs, rainforests and African savannas; our research ranges from sea turtle conservation to rainforest restoration.

Students in summer programs join our faculty in conducting research to assist local communities with the wise management of natural resources. At the end of the program, students present the results from their research to members of the local community. The work conducted by SFS students has the potential of making a positive difference in the lives of individuals around the globe. In return, students can explore potential academic and career choices while developing decision-making skills.

Each course carries four semester credits in Environmental Studies. In some cases, the summer course may fulfill a university's field study requirement. There are no course pre-requisites for summer courses, and programs are open to students from academic backgrounds ranging from environmental studies and biology to arts and languages. The majority of summer participants are college undergraduates, but motivated high school seniors and recent college graduates may also participate.



Summer Program Caribbean Turks & Caicos Islands Marine Parks Management Studies



The reefs of South Caicos harbor an incredible array of marine life. These marine resources have proven critically important for the people of this island. The reefs provide excellent habitat for spiny lobster and queen conch, whose harvest provides the mainstay of the South Caicos economy. Increasingly, these reefs also attract tourists who come to view coral, spotted rays, barracuda, sea turtles, grouper and sharks through water renowned for its outstanding clarity. The importance of these reefs has not guaranteed their survival, however, and the reefs face pollution, dredging, dumping and damage from boats and divers. In 1992 the local government established a park system, which included marine parks intended to

Summer Program Dates:
Session I: June 10 - July 9
Session II: July 16- August 14
Departure Point:
South Caicos Island, TCI, BWI
Course Number:
EE(NS) 373



preserve
important natural
areas, conserve
economically
important species
and promote
ecotourism. The
management of
these parks

presents several challenges. The need for preservation and economic growth go hand in hand on South Caicos, and data are needed to determine the role of marine parks in stimulating the local economy.

Project Focus:

Assessing the Role of Marine Parks for South Caicos Island

Research will focus on the role of marine parks in enhancing the resource development potential of South Caicos. Issues of marine ecology, ecotourism, fish stock assessment and coastal zone management will all play a role in our efforts. We will work closely with members of the local community, ranging from local fishermen to members of key government agencies. Our goal is to collect data from the field, which may lead to policy recommendations, marine parks management plans and community projects.

Field Work and Expeditions

The spectacular reefs and waters of South Caicos will serve as the laboratory for most of our field work. Students will snorkel or SCUBA, and gain valuable

experience in the use of transects, techniques for population sampling and statistical analysis. Potential research sites

and trips include: East Harbour Lobster and Conch Reserve (EHLCR); Bell Sound Nature Reserve; Fish Cay; Tucker's Point Reef Shark Alley; Long Cay; Dove Cay; The Point Admirals Aquarium and Mangrove Island.



Community Involvement

Our Center is located within the community of South Caicos, and students will have ample opportunity for cultural interaction. Fishermen and other residents may be interviewed during academic projects, and students may participate in sporting events and community service activities.

For further information on SFS research and our field station on Turks & Caicos Islands, please see page 8.



Summer Program

Australia

Tropical reforestation Studies



Australia's spectacular tropical rainforests are home to primitive plant species, birds and marsupials found nowhere else in the world. Giant strangler figs standing 70 feet tall, crimson and green king parrots, sulfur crested cockatoos, rainbow lorikeets, bandicoots and tree kangaroos are just a few of the species filling these forests with color and sound. The ancient rainforests of northeastern Queensland preserve millions of years of evolutionary history. Parts of Queensland were once

Summer Program Dates:
Session I: June 10 - July 9
Session II: July 16 - August 14
Departure Points:
Cairns, North Queensland
Australia
Course Number:
EE(NS) 355



covered in rainforests, but agriculture, ranching, mining and logging have destroyed and disrupted rainforest habitat, with only a narrow belt remaining along the eastern coast. Australia moved to confront these threats faster than most tropical countries, and protected most of its remaining forests under World Heritage designation in 1988.

Project Focus

Reforestation of the Atherton Tableland

Although the rainforests of the Atherton Tableland are protected as World Heritage sites, the pressures on them continue. The local community struggles with differing views about how these forests should be used and managed. Several local groups have focused on the concept of rainforest reforestation. The basic premises of reforestation, and the benefits they promise for endangered wildlife species such as the cassowary and tree-kangaroo, seem self-evident. Yet the realities of rainforest restoration are much more complex. Rainforest ecosystems are incredibly diverse, characterized by a slow rate of regeneration. It is not clear if degraded forest can ever be returned to its original state. In addition, given the differing views of the local community, any strategies for reforestation must be shown to have economic benefits if they are to be viable in the long term.

Lectures addressing relevant topics in conservation biology, forest ecology and tropical resource management provide the basis for our fieldwork. Students will monitor several past reforestation efforts and assess specific reforestation and site management strategies. These data will be used to develop a reforestation plan for a new plot in the Atherton Tableland, where students will be involved in physically planting rainforest seedlings.

Field Work and Expeditions

Potential Field Trips

- **Chillago:** camp in the Outback and explore caves, rock formations and eucalypt forests in a region once covered in rainforest. At Petford we learn first hand about the history of the Aborigines, and examine land management issues with members of this community.
- **Trip to past reforestation plots** around the tablelands to assess the success of various tree species and planting techniques
- **Numerous field exercises** in surrounding World Heritage rainforest, an area containing spectacular waterfalls, trees and wildlife.

Community Involvement

Students will have the opportunity to work with members of local conservation groups, and may interview farmers and other local residents. Less formal activities for social interaction may include participation in sporting events and visiting local historic pubs.

Summer Program Vancouver Island British Columbia

Conserving Marine Resources & Coastal Rainforests



T

he forests in the Pacific Northwest support some of the oldest and largest trees in the world and much of the world's remaining temperate rainforests are found along Vancouver Island's west coast. Forests of towering red-cedar, Sitka spruce and western hemlock are a haven

Summer Program Dates:
Session I: June 10 – July 9
Session II: July 16– August 14
Departure Points:
Vancouver Island, British Columbia
Course Number:
EE(NS) 353

for wildlife, including bald eagles, wolves and black bears. The coastal marine zone provides for abundant fish and seabird species, including five highly-threatened species of salmon, as well as marine mammals such as orca, porpoises and sea lions. There



is a growing urgency to protect and conserve the temperate rainforests in the Pacific Northwest. Our field station in BC is one of the best places in the world to study global forest and coastal resource issues.

Project Focus

Conserving Coastal Rainforests and Marine Resources

The ecosystems and communities of Vancouver Island are unlike any on earth. They present an exotic blend of environments, cultures, economics and politics. Visits to the old-growth rainforests are nothing short of awe inspiring. At night, stars and the Aurora Borealis illuminate the night sky. The human community is diverse, with native First Nations people coexisting with non-native people who have been on Vancouver Island for generations. The local economy is strongly dependent on three industries—logging, fishing and tourism. With these complex factors, it is easy to understand why past conservation strategies have been hotly debated. Successful conservation strategies must contribute to the economic needs of the people, while also contributing to the long term conservation of the incredible ecology and cultural heritage found here.

Our laboratory includes First Nation lands and other protected areas. By utilizing a watershed approach, we will examine the interconnectedness of forestry and fisheries and discuss relevant management practices. We will examine areas from the top of the watershed to the ocean, with specific focus on the river continuum, forestry, stream restoration and estuary/intertidal ecology. The issues and solutions examined are critically important, and are frequent topics of current local and national news. Our goal is to design forest management strategies which do not negatively impact critical salmon fisheries.

Field Work and Expeditions

Potential Field Trips

- Carmanah National Park: multi-day camping excursion to experience some of the oldest and largest trees in the world and a classic example of successful community activism
- Visit to the House of Huu-ay-aht to gain insight into First Nation history and culture
- Trip to forest stands managed by industrial logging organizations and ecoforestry organizations
- Numerous hikes to surrounding beaches and temperate rainforest.

Community Involvement

This area of Vancouver Island can present students with a cultural experience unlike anything from the United States with numerous opportunities to meet and work with local people. We help organize and participate in various community service projects, and students frequently host open houses. Less formal activities may include socializing at the local pub.

For further information on SFS research and our field station on Vancouver Island, please see page 16.



Summer Program

Baja, Mexico

Conserving Coastal Diversity



Bahía Magdalena is an area of profound physical beauty.

It is among the largest remaining intact coastal wetland/lagoon systems along the Pacific coast of the Americas. Habitat diversity in the Bay is high, including extensive sea grass beds, mangrove stands, intertidal sand and mudflats and large rocky shore areas on the Pacific side of the barrier islands of

Magdalena and Margarita. Large populations of bottlenose dolphins and sea lions are common sights. The Bay is an

Summer Program Dates:

Session I: June 10 - July 9

Session II: July 16- August 14

Departure Points:

La Paz, Baja California Sur, Mexico

Course Number:

EE(NS) 356



important feeding ground and nursery area for several species of endangered sea turtles, and over 100 species of migratory and resident birds use the Bay at various times of the year.

Project Focus

Conservation of Marine Turtles in Bahía Magdalena

Bahía Magdalena has played an important role as a refuge for several sea turtle populations, including Loggerheads, Olive Ridleys and the rare Hawksbill turtles. The endangered East Pacific Green turtles use the Bay for both breeding and feeding habitat. These turtles have a high degree of both natural and human-induced mortality. Despite strict laws and prohibitions against their exploitation, green turtles are still frequently harvested for meat and eggs and unintentionally caught as by-catch. A complex interaction of social factors, mismanagement and economic hardship has led to the rapid decline of sea turtle populations throughout Mexico.

We will examine the ecological, social and economic issues surrounding sea turtles in Bahía Magdalena. We will be exposed to a variety of environmental issues such as fishing cooperatives, who are over-harvesting the fisheries; a local cannery that is polluting the rich mudflats and seagrass beds; ranchers who are cutting too many mangroves for fence-posts; and poachers who continue to illegally take protected sea turtles. Using data collected during field work, our goal is to design strategies for the protection and management of sea turtles in the Bahía Magdalena area.

Field Work and Expeditions

Potential Field Trips

- Camping trip to the off-shore Pacific island of Isla Magdalena to view the incredible ecology of the bay
- Sea turtle population assessment by collecting biological data on live and stranded turtles in the Bay
- Evaluating the social and economic importance of sea turtles by surveying local fishers and townspeople.

Community Involvement

Students will enjoy a warm welcome into the local community, with many opportunities to practice Spanish and learn about Mexican culture. Students will interview residents during academic research and may participate in community service projects, sporting events and spend time socializing at local taquerías and clubs.

Summer Program Costa Rica

Strategies for Sustaining Tropical Ecosystems



Costa Rica's landscape is as varied as it is beautiful. Its cloud forests and rainforests are home to monkeys, sloths, jaguars and exotic birds. Dry forests, mountain plains and fields of coffee, bananas and pineapples help complete this stunning mosaic. Costa Rica has a long history of preservation, and has developed an extensive national park system. However, with large-scale agriculture still playing a vital role in Costa Rica's economy, it is clear that parks may not be enough to

Summer Program Dates:
Session I: June 10 - July 9
Session II: July 16 - August 14
Departure Points:
San Jose, Costa Rica
Course Number:
EEINS 352



sustain this incredible biodiversity. Costa Rica struggles to balance environmental protection with the economic needs of its people. Successful management strategies must incorporate both.

Project Focus

Developing Strategies for Sustaining Tropical Ecosystems

In our search for viable management strategies, we will examine issues of applied tropical ecology, eco-tourism, watershed management, protected area management and sustainable agriculture. We will work very closely with members of the local community, hearing from experts on federal protection schemes, the operation of privately owned reserves and alternative methods of agriculture. Using data collected during field work, we will attempt to design several strategies which provide for the long-term protection of Costa Rica's biodiversity, and the economic needs of the local community.

Field Work and Expeditions

Potential Field Trips

- Viewing the incredible tropical ecology and eco-tourism efforts of several national parks, including expeditions to Braulio Carrillo, the most extensive rainforest national park in the country
- Evaluating and comparing the efforts of private reserves like the Monteverde Cloud Forest Preserve, home to jaguars, ocelots and quetzals
- Visits to Poas Volcano, the second largest volcano crater in the world
- Assessing the efforts of coffee cooperatives and organic agriculture ventures in the surrounding area.

Community Involvement

Students will enjoy a warm welcome into the community of Atenas, with many opportunities to practice Spanish and learn about Costa Rican culture. Students will interview residents during academic projects and may participate in sporting events and spend time socializing at local cafes.

"Our interactions with local families provided a complete cultural experience. . . no classroom experience can provide that type of learning."

— Matthew Provost
Wareham, MA - Ithaca College

For further information on SFS research and our field station in Costa Rica, please see page 24.



Summer Program

Kenya

Community Wildlife Management



Modern pressures and the country's soaring population increasingly threaten the habitat required by Kenya's wildlife.

Lions, elephants, giraffes, rhinos, monkeys, zebra and other indigenous wildlife are the country's most famous and

economically valuable resource.

At the same time, many

Kenyans struggle to raise

enough food just to survive.

Farmers are being forced onto land that is marginal or unsuitable for agriculture and traditional pastoralist lifestyles. Previously nomadic peoples, such as the Maasai, and the cattle herds that

Summer Program Dates:
Session I: June 10 – July 9
Session II: July 16– August 14
Departure Points:
Nairobi, Kenya
Course Number:
EE(NS) 350



provide their primary sustenance, have been confined to smaller plots of land while their numbers grow, resulting in overgrazing and rangeland devastation. The wild animals, which have co-existed for centuries with these non-hunting people, are now seen as competitors for scarce water and grazing resources.

Project Focus

Community Wildlife Management Options

Students have the opportunity to examine wildlife management at one of our two new locations—the National Park Camp, just outside Nairobi National Park, or the Kilimanjaro Bush Camp. Students based at the National Park Camp focus on management strategies for Kenya's oldest and most profitable national park. Increased development around the Park threatens its biological welfare and has led to the decline of large mammal populations. Pollution degrades the water supply and contributes to the death of numerous birds and animals. Increased human and livestock populations around the Park are leading to intensified human-wildlife conflicts, including disease and destruction of crops by migrating wildlife.

Students at the Kilimanjaro Bush Camp will study the diverse surrounding habitat, which is used by wildlife as a migration corridor between Tsavo and Amboseli National Parks. Maasai primarily use this area as a communal grazing zone for livestock. As a result, residents often face economic hardship due to crop damage and loss of livestock inflicted by migrating wildlife.

At both field stations, topics covered include African climatology and geomorphology, plant and animal identification and theories of island biodiversity. We will meet wildlife managers and gain insight into cultural perceptions by speaking with members of the Maasai community. Data collected during field work will be used to assess the best land use and wildlife management options for the local community.

Field Work and Expeditions

Potential Field Trips

- Trips to National Parks, such as Amboseli, Tsavo and the Maasai Mara to camp and view the spectacular wildlife
- Visits to cultural manyattas to gain insight into Maasai history and traditions
- Field expeditions to conduct vegetation sampling, community surveys and wildlife abundance assessments.

Community Involvement

Students have the many opportunities to interact with local communities, including the Maasai. Farmers, ranchers and park wardens may be interviewed during academic projects. Students often participate in sporting events and community service activities.

For further information on SFS research and our field station in Kenya, please see page 28.

Admission Requirements and Instructions

We seek to put together a group of students who will work together as a team. The most successful teams are comprised of students who are motivated, intellectually curious, enthusiastic, flexible, compassionate, socially concerned and possess the maturity and personal initiative to take advantage of our unique educational opportunities. The Admissions Committee strives to bring together a diverse group of students who are committed to working with others toward a common goal. Programs fill quickly, so we encourage you to apply early to ensure admission into the program of your choice. Applications are reviewed on a year-round, rolling basis.

The SFS experience will likely be very different from your traditional academic experience. We are setting off together on a journey and we ask you to consider yourself to be crew, not a passenger. We expect and encourage you to take a proactive role in all aspects of your education from scheduling activities, choosing research projects, to managing risk.

Admission to SFS is open to qualified students without regard to sex, race, sexual orientation, color, national or ethnic origin, economic status, physical or mental disability or other protected status.

Admission Requirements

Applicants for semester programs must be at least 18 years of age, be in good academic standing and have completed at least one college level ecology or biology course, and preferably at least one semester of college.

Applicants for summer programs must be at least 16 years of age, be in good academic standing and have completed at least the junior year of high school.

Application Instructions

Before applying, be sure you understand the program components and prerequisites and have carefully read the relevant program information.

Your completed application includes:

- Application form
- \$45 non-refundable application fee
- Transcripts: submit official, current transcripts from all schools attended.
- References: submit two (2) reference forms. The first reference is an Academic Reference, which must be from a teacher, professor or academic advisor who is well acquainted with your current academic performance. The second reference is a Character Reference and should be completed by someone who knows you well. This reference can be from another academic person, a job supervisor, a volunteer advisor, an athletic coach, etc. but may not be completed by a relative or peer.

Please ask each reference to complete the form and return it to you in a sealed envelope, signed across the back.

Acceptance

Applications for all programs are reviewed on a rolling basis as soon as all required information is received. We strongly urge you to apply early to join the program of your choice. Wait lists are maintained for programs that fill early.



Physical Examination and Medical Insurance

All acceptances are contingent upon medical approval. You must present a completed SFS Medical Form signed by a doctor. Students with late medical forms may forfeit their space.

All medical forms must be approved by the SFS Medical Committee. You must be able to meet the physical challenges presented by SFS programs without undue risk to yourself or others. Academically qualified individuals may be disqualified from participating on medical grounds. You will not be allowed to join an SFS program without proof of up-to-date medical insurance and a signed medical release.

Send your materials and application fee to:

**The School for Field Studies
16 Broadway
Beverly, MA 01915**

Tuition, Financial Aid and Scholarships

Tuition, Fees and Deposits

The School for Field Studies (SFS) meets the expenses of our programs through a combination of program revenue, grants and donations. Our program fees cover room and board, program-related ground transportation and park entrance fees, field equipment, supplies, orientation and pre- and post-program advisory services. Program cost does not include transportation to and from the program.

Full tuition is due sixty (60) days prior to program commencement. A late fee of \$150 may be assessed to students with an outstanding balance after this point. You will not be allowed to participate in the program with an outstanding tuition balance. Note: The tuition fees listed in this catalogue are for Fall 2001 through Summer 2002. New tuition and program fees for Fall 2002 will be announced in March.

In addition to tuition charges, please also consider the following to determine the total cost of your participation:

- transportation and travel arrangements
- clothing and equipment
- physical examination, immunizations and medical insurance
- personal expenses (during semester program break)
- Passport and Visa.

You must have a passport that is valid for at least six months after the program ends.

Financial Aid

SFS makes every effort to make programs affordable to all students. We are committed to involving as many qualified students as possible and will work with you to facilitate your participation. Don't let financial constraints stand in the way of submitting your application. Thanks to generous support from foundations, corporations and individuals, one in three SFS Students received financial assistance through SFS in 2001.

SFS Financial Aid, in the form of scholarships and/or interest free loans, is available to qualified students based on need. Some applicants receive a combination grant and loan while others receive only loan funding. Many applicants receive aid through their home schools or other outside sources. You may qualify for SFS assistance even if you are not receiving aid from your home school.

If you will need financial assistance in order to participate we strongly encourage you to complete an SFS Financial Aid Application as soon as possible. Financial Aid Applications are reviewed following admissions decisions. For an application or more information on how to qualify for assistance, please call the SFS Admissions Office at 800-989-4418.

Semester Students: A growing number of schools allow students to take institutional financial aid off-campus. Check with your financial aid office to see what aid you can apply to your SFS program. We encourage you to investigate applying for federal financial aid funds including Stafford Loans through your home school. Because the credits you earn for your SFS participation will, in all likelihood, be applied toward your degree, your school may be able to process a Stafford Loan to assist your SFS participation. If you encounter difficulty in arranging to use federal financial aid funds for your SFS program, please ask your financial aid officer to contact us and we will do our best to assist you.

** You must complete and return the financial aid application within 10 days of acceptance to qualify for refund status on the registration fee and deposit.*

Refund Policies

Full tuition is due sixty days prior to program commencement.

SEMESTER

If you withdraw by notifying SFS by letter, fax or email the following amounts will be refunded:

- Withdrawal 61 days or more prior to the first day of the program = 100% refund of total program cost (less deposit and registration fee).
- Withdrawal 60-31 days prior to the first day of the program = 50% refund of total program cost (less deposit and registration fee).
- Withdrawal 30 days prior - 14 days after the start of the program = 25% refund of total program cost (less deposit and registration fee).
- Withdrawal 15 or more days after the start of the program, or if a student is asked to leave the program = NO REFUND.

The non-refundable deposit may be transferred to an SFS course within the next 12 months subject to approval. Financial aid candidates: deposits and registration fees are refundable if withdrawal is less than 10 days following financial aid offer. (You must complete and return the financial aid application within 10 days of acceptance to qualify for refund status on the registration fee and deposit). *Application and Registration fees are non-refundable.*

SUMMER

If you withdraw by notifying SFS by letter, fax or email the following amounts will be refunded:

- Withdrawal prior to 60 - 22 days before the start of the program = 100% refund of total program cost (less deposit and registration fee).
- Withdrawal 21 - 0 days prior to the start of the program = 50% refund of total program cost (less deposit and registration fee).
- Withdrawal after the program starts = NO REFUND.

Financial aid candidates: deposits and registration fees are refundable if withdrawal is less than 10 days following financial aid offer.

Application and Registration fees are non-refundable.

SEMESTER COSTS 2002

Program	Tuition	Program Fees	Total Program Cost
Caribbean	\$9,780	\$3,185	\$12,965*
Australia	\$9,780	\$3,660	\$13,440*
Baja, Mexico	\$9,780	\$3,195	\$12,975*
British Columbia	\$9,780	\$2,995	\$12,775*
Costa Rica	\$9,780	\$3,195	\$12,975*
Kenya	\$9,780	\$4,090	\$13,870*

**All semester programs have an additional registration fee of \$150.*

Payment of \$650 (non-refundable \$500 deposit and \$150 non-refundable registration fee) is due no later than 10 days after acceptance in order to reserve a place in the program.

SUMMER COSTS 2002

Program	Tuition	Program Fees	Total Program Cost
Caribbean	\$2,560	\$935	\$3,495*
Australia	\$2,560	\$1,165	\$3,725*
Baja, Mexico	\$2,560	\$535	\$3,095*
British Columbia	\$2,560	\$535	\$3,095*
Costa Rica	\$2,560	\$785	\$3,345*
Kenya	\$2,560	\$1,435	\$3,995*

**All summer programs have an additional registration fee of \$100.*

Payment of \$450 (non-refundable \$350 deposit and \$100 non-refundable registration fee) is due no later than 10 days after acceptance in order to reserve a place.

Expectations and Responsibilities

Student Conduct

You are expected to conduct yourself in a mature and responsible manner. The School for Field Studies, (SFS) reserves the right to require any participant to withdraw from any program at any time if the Center staff deem the student's conduct to be detrimental to or incompatible with the interest, harmony, comfort, safety or welfare of the program — including abuse of alcohol or use of drugs not authorized by a medical doctor, or uncooperative or disruptive behavior. Should such a decision be made, SFS will notify your guardians and return you to the point of program departure, at which time any and all responsibility on the part of SFS will cease.

Responsibility

In organizing and managing these programs, SFS, its agents, employees and staff shall not be liable, financially or otherwise, for among other things, non-performance or unsatisfactory service, injury to persons including death, loss of, or damage to property, for accident or delay, and/or expenses arising from strikes, weather, quarantine, sickness, government regulations, or from any act or omission of its agents, contractors, and/or airline, railroad, bus company, automobile rental agency, hotel, or other suppliers of service.

SFS is a charitable corporation located in Beverly, Massachusetts, U.S.A. All matters relating to, arising out of, or involving in any way your relationship with SFS shall be governed by Massachusetts law and any legal dispute shall be determined by a Massachusetts court.

SFS reserves the right to refuse any applicant admission to any program if s/he is deemed unsuited for the program for any reason. All courses, fees, and dates are tentative until verified and confirmed in writing by SFS.

SFS admits students of any sex, religion, race, color, national or ethnic origin, sexual orientation, or economic status to all the rights, privileges, programs and activities generally accorded or made available to students of SFS and does not discriminate on the basis of sex, religion, race, color, sexual orientation, national or ethnic origin, physical or mental disability or other protected status in the administration of its educational policies, admissions policies, scholarship loan programs and other School-administered programs. SFS is an equal opportunity institution.

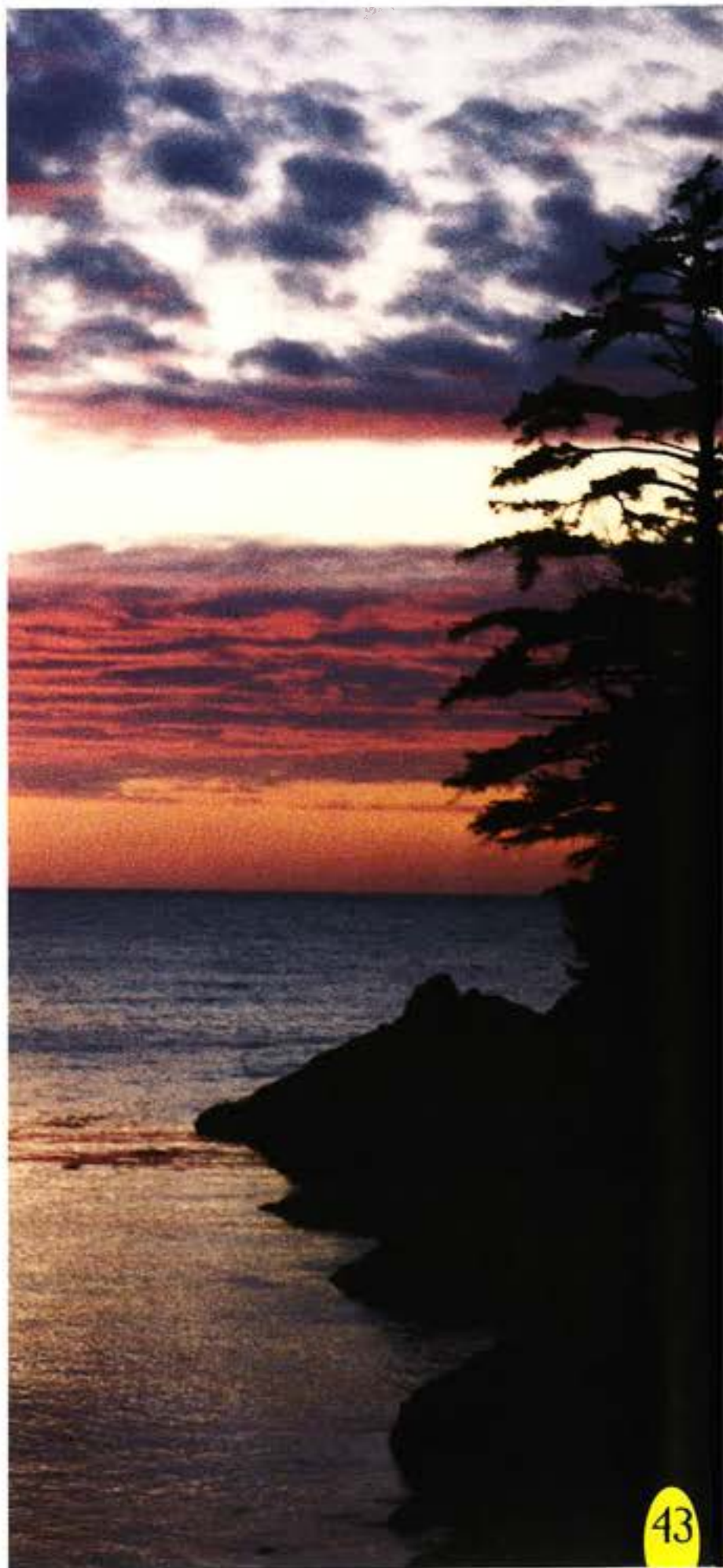
Program Changes

SFS operates in a variety of environments. As a result, there are various factors that may effect a program.

For example:

- Our programs take place in highly regulated and sensitive environments, requiring special permits
- Projects depend on the goodwill and generosity of individuals and institutions
- Tenuous weather situations, natural disasters or changes in political conditions may require last-minute changes in sites or research plans.

These or other variables (including staffing) may result in changes before or during a program. Indeed, part of your challenge lies in adapting to changing conditions and overcoming the obstacles they may present.



Academic Credit

SFS participants are registered at and receive transcripts from Boston University, which accredits its SFS programs. The only exceptions are students from SFS Affiliate and Consortium schools who receive credit directly from their home institutions.

All SFS courses are approved and assigned course numbers by Boston University. SFS semester programs incorporate four courses and carry a total of 16 semester-hour credits in biology or environmental studies from Boston University. Summer courses carry 4 semester-hour credits in environmental studies.

Participants receive an official transcript from Boston University approximately six- to eight weeks after the conclusion of the program for delivery to the office responsible for credit transfer at your home institution. Students from over 300 colleges attend SFS programs each year and most are able to transfer credit for their participation. The final decision regarding credit and grade transfer rests with your home institution. Therefore, you should check with your advisor/registrar when applying to our programs to learn how your SFS course work will be applicable for credit in your degree program. If you have questions regarding credit transfer, please call the SFS Admissions Office at (800-989-4418).

In most instances, we can direct you to someone on your campus familiar with credit transfer for SFS programs.

Following is a partial list of home schools of previous SFS participants:

Adelphi University*	Kenyon College*	University of California/ San Diego
Albion College*	Knox College	University of California/ Santa Barbara
Allegheny College†	Lehigh University	University of California/ Santa Cruz
Alma College	Lewis and Clark College	University of Cincinnati
American University	Macalester College	University of Colorado
Amherst College	McGill University	University of Connecticut
Auburn University	Miami University*	University of Florida
Barnard College	Michigan State University	University of Georgia
Bates College	Middlebury College†	University of Iowa
Baylor University	Mills College	University of Kansas
Bennington College*	Mount Holyoke College*	University of Maryland
Binghamton University	Muhlenberg College	University of Massachusetts
Boston College	New York University	University of Miami*
Boston University*	Northeastern University	University of Michigan†
Bowdoin College	Northern Arizona University	University of Minnesota
Brandeis University*	Northwestern University	University of New Hampshire
Brigham Young University	Oberlin College	University of North Carolina
Brown University	Occidental College	University of Pennsylvania
Bryn Mawr College	Ohio State University*	University of Pittsburgh
Bucknell University	Ohio University	University of Puerto Rico
Carnegie Mellon University	Ohio Wesleyan University	University of Puget Sound
Case Western Reserve University	Oregon State University	University of Redlands*
Claremont McKenna College	Pacific Lutheran University	University of Rhode Island
Clark University*	Pennsylvania State University	University of Richmond
Colby College*†	Pepperdine University	University of San Diego*
College of Charleston	Pitzer College	University of Southern California
College of the Holy Cross	Pomona College	University of Tennessee
College of Wooster	Providence College	University of the South
Colorado College	Purdue University	University of Utah
Colorado State University	Reed College	University of Vermont
Connecticut College*	Rice University	University of Virginia
Cornell University	Rutgers University	University of Wisconsin
Dalhousie University	SUNY College of Environmental Sciences and Forestry*	Vanderbilt University
Dartmouth College	Saint Lawrence University	Vassar College
Davidson College*	Saint Michael's College	Villanova University
Denison University*	Saint Olaf College	Wake Forest University
DePauw University*	Salem State College	Washington and Lee University
Dickinson College*†	Santa Clara University*	Washington University
Drake University	Scripps College*	Wellesley College
Drew University	Skidmore College	Wells College*
Duke University	Smith College*	Wesleyan University
Earlham College	Stanford University	Wheaton College
Emory University	Swarthmore College	Whitman College*
Franklin and Marshall College	Texas A&M University	Willamette University
George Washington University	Trinity College*	William Woods College*
Georgetown University	Trinity University	Williams College
Gettysburg College	Tufts University	Wittenberg University
Gonzaga University*	Tulane University	Yale University
Grinnell College*	University of Alberta	
Hamilton College	University of Arizona	
Hamline University	University of California/Berkeley	
Hampshire College	University of California/Irvine	
Harvard University	University of California/ Los Angeles	
Humboldt State University		
James Madison University		

The SFS Affiliate Program

The SFS Affiliate Program assists students in maximizing their SFS experience by building better linkages to the academic community from which SFS students are drawn. Students from Affiliate institutions receive preferential admission and financial aid from SFS. Affiliate schools typically provide direct academic credit for SFS participation and have curricular input into SFS programs. Each Affiliate school has an SFS liaison who is available to provide on-campus advising on our programs. Applicants from Affiliate schools must obtain permission to participate from their campus Affiliate Representative.

The current SFS Affiliate Members are:

Adelphi University -Dr. Gayle Insler	Mount Holyoke College -Ms. Joanne Picard
Albion College -Dr. Timothy Lincoln	Ohio State University -Ms. Julie Zimmerman
Bennington College -Dr. Kerry Woods	Santa Clara University -Dr. Dennis Gordon
Boston University -Dr. Carter Cleveland	Scripps College -Ms. Valerie Eastman
Brandeis University -Mr. J. Scott -Van Der Meid	Smith College -Dr. Adrian Beaulieu
Clark University -Dr. Todd Lisdahl	SUNY College of Environmental Sciences and Forestry -Dr. Donald Leopold
Colby College -Dr. David Firmage	Trinity College -Dr. Daniel Blackburn
Connecticut College -Ms. Shirley Parson	University of Miami -Dr. Dan DiResta
Davidson College -Dr. Michael Dorcas	University of Redlands -Dr. Ben Dillow
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Gonzaga University -Ms. Wanda Reynolds	Whitman College -Dr. Robert Carson
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†Member of Sustainable
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